DOCUMENT RESUME

ED 318 122   EA 021 785

TITLE   Success for All in a New Century: A Report by the
                Council of Chief State School Officers on
                Restructuring Education.
INSTITUTION   Council of Chief State School Officers, Washington,
                D.C.
PUB DATE   Nov 89
NOTE   59p.
AVAILABLE FROM Publication Sales, Council of Chief State School
                Officers, 379 Hall of the States, 400 North Capitol
                Street, N.W., Washington, DC 20001-1511 ($10.00).
PUB TYPE   Reports - Evaluative/Feasibility (142)

EDRS PRICE   MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS   Accountability; *Administrator Role; Curriculum
                Development; *Decentralization; Elementary Secondary
                Education; *Governance; *High Risk Students;
                Participative Decision Making; *School Based
                Management; School Choice; School Organization;
                *Teacher Role
IDENTIFIERS   *Educational Restructuring

ABSTRACT
                For all students to become responsible citizens and
productive workers, the nature of "effective learning" and the
characteristics of schools providing it must change. This report
reviews the value and potential of various proposals to change the
instruction of at-risk students from a pedagogy of minimal basic
skills to a pedagogy of learning that is critical, diagnostic,
adaptable, and long-lasting. The report categorizes restructuring
efforts, identifies elements within each category, and discusses how
their restructuring could lead to improved learning for all students.
The first of three sections examines state school restructuring
efforts. The second section reviews district level initiatives, and
the third section outlines several restructuring projects promoted by
national organizations and individuals. The sections discussing state
and district initiatives focus on four educational variables: (1)
school governance changes, involving decentralization of authority to
the school site and flexible enrollment options; (2) the nature and
organization of curriculum and instruction, or efforts to provide a
creative, flexible, and challenging education for all students; (3)
new professional roles for educators; and (4) accountability
emphasizing performance-based outcomes. An appendix includes a policy
statement and lists principles for change and enabling strategies for
states. (63 references) (MLH)

Success for All
in a New Century:

A
Report
by the
Council
of
Chief
State
School
Officers
on
Restructuring
Education

2 BEST COPY AVAILABLE

The Council of Chief State School Officers (CCSSO)

is a nationwide non-profit organization of the 57 public officials who head departments of public education in every state, the District of Columbia, the Department of Defense Dependents Schools, and five extra-state jurisdictions. CCSSO seeks its members' consensus on major education issues and expresses their views to civic and professional organizations, to federal agencies, to Congress, and to the public. Through its structure of committees and task forces, the Council responds to a broad range of concerns about education and provides leadership on major education issues.

Because the Council represents the chief education administrator, it has access to the educational and governmental establishment in each state and to the national influence that accompanies this unique position. CCSSO forms coalitions with many other education organizations and is able to provide leadership for a variety of policy concerns that affect elementary and secondary education. Thus, CCSSO members are able to act cooperatively on matters vital to the education of America's young people.

The CCSSO Resource Center on Educational Equity provides services designed to achieve equity in education for minorities, women and girls, and for disabled, limited English proficient, and low-income students. The Center is responsible for managing and staffing a variety of CCSSO leadership initiatives to provide better educational services to children and youth at risk to school success.

Council of Chief State School Officers
William B. Keene (Delaware), President
Herbert J. Grover (Wisconsin), President-elect
Gordon M. Ambach, Executive Director
Cynthia G. Brown, Director, Resource Center on Educational Equity

Table of Contents

I. Acknowledgements

The Council of Chief State School Officers (CCSS0) has centered its work for the past three years on the assurance of school success for students who have been placed at risk to that success. In 1989, under the leadership of then CCSS0 President Ted Sanders, the Council adopted as a major initiative, the examination of proposals and efforts to restructure schools with respect to their impact on increasing the effectiveness of learning for all students, but particularly for those at risk.

As part of this initiative the Council produced two documents to call attention to the critical need of fundamental school change, and to assist states in their efforts to effect such change. The first provides principles and enabling strategies to direct major redesign of schooling and the second reports on current attempts to design and implement new arrangements of schooling and how they might significantly improve learning for all students.

At the Council's Annual Meeting in November, 1989, CCSS0 adopted a guiding statement, "Restructuring Schools: A Policy Statement of the Council of Chief State School Officers." At the same meeting, the Council released this report "Success for All in A New Century: A Report by the Council of Chief State School Officers on Restructuring Education."

Several people are responsible for the preparation, review and final release of this report on efforts to restructure schooling. More than a year ago President Ted Sanders directed two CCSS0 Committees to oversee and direct the work in this area. The Council Committee on Educational Equity, chaired by Harold Raynolds, Jr., Massachusetts Commissioner of Education, worked jointly with the Committee on Instruction chaired by H. Dean Evans, Indiana Superintendent of Public Instruction.

The members of the Committee on Educational Equity also include: Thomas Sobol (New York), Linda Creque (Virgin Islands), Andrew E. Jenkins, III (District of Columbia), Robert Leininger (Illinois), Lealofi Uiagalelei (American Samoa), and Franklin Walter (Ohio). The Committee on Instruction includes chief state school officers: James R. Moss (Utah), Robert E. Bartman (Missouri), Eve M. Bither (Maine), Bob Etheridge (North Carolina), and Anita A. Sukola (Guam). The members of these two committees deserve recognition and thanks for the leadership that they provided throughout the year.

The joint work of the Committees on Educational Equity and Instruction was supported by the staff of the Council's Resource Center on Educational Equity, directed by Cynthia G. Brown. Christopher M. Harris, Project Associate at the Resource Center on Educational Equity, was the primary author of this report.

Barbara West prepared the manuscript for publication.

The Council also wishes to thank Anne Lewis. As a consultant to CCSS0 she brought her considerable talents as writer and educator to assist the Council in drafting its Policy Statement.

"Nothing endures but change."
—Heraclitus, c.500 B.C.

The rate of societal change has dramatically increased during the last two centuries. Remarkable innovations in areas such as manufacturing, science, health care, technology, transportation, and communication have resulted not only in new tools, products, and services but also in new kinds of employment, new skills required for workers and a new labor force with a reduced need for a large, low-skilled, industrial workforce.

Education has both created these capacities to change and must respond to these changes. As this century ends, a new challenge confronts elementary and secondary schooling. For the first time, schools must ensure the educational success of <u>all</u> students—a success measured by capacity to enter a labor market and participate in a democratic society that demand unprecedented levels of knowledge, creative thinking, flexibility, and shared decisionmaking.

The continuing and new chan_es in the economy—integration of a world economy, shifts of production from goods to services, greater application of high technology to most industries, increased complexity of markets, shifting labor force composition and requirements, growing disparity of wealth, and increasing number of children in poverty—combined with continuing changes in the nation's demographic composition are forcing powerful and deep challenges to the social structure of the United States.

Dramatic and fundamental improvements must be made in American schools. The need exists to strengthen and restructure schools for all students. But the most daunting challenge is to provide effective schooling for students who have historically not succeeded.

The Council of Chief State School Officers believes that virtually *all* students must graduate from high school, prepared with the foundation capacities in communication and computation, and the higher order capacities to use experience and knowledge to analyze problems, challenge ideas, reflect, and create. These capacities are to prepare students for and give them experience with civic responsibility, productive work and ethical conduct.

The Council emphasis on school success for *all* is a continuing priority. In 1987 the members voted unanimously to adopt a policy statement which established a set of state guarantees for educational and related services. If implemented, these provisions should result in high school graduation of virtually all students by the year 2000. The following year in its 1988 policy statement, CCSS0 outlined the necessary steps for providing high quality early childhood and family education for those at risk as a critically important strategy for school success.

This year the Council examines efforts by national organizations, states, and local education agencies to change the practice and organization of schooling in ways that result in substantially improved student learning for all. The result is a statement, "Restructuring Schools: A Policy Statement of the Council of Chief State School Officers." The statement captures the consensus of the nation's state education executives on principles for change and state strategies for change of elementary and secondary education. These principles and strategies should guide the use or adaptation of the various projects described in this report. This statement is included in this report as Appendix one.

New challenges require new solutions. The solutions must be as intelligent and comprehensive as the problems are complex and seemingly intractable. Catchy slogans and silver bullet remedies are not sufficient. Instrumental solutions must be guided by thoughtful agreements on a vision and goals of what students should know and be able to do; how they should be prepared for productive, thoughtful, responsible, and ethical lives.

The purpose of this report is to inform such solutions.

School restructuring—the fundamental redesign of the organization and methods of schooling—has become a major part of the discussion about education in this nation. The growing recognition by educators and others that traditional schooling does not adequately serve an increasingly large proportion of students has triggered actions aimed at ensuring that all students receive a challenging and appropriate education.

For all students, but especially for at-risk students, to become responsible citizens and productive workers in the next decades, the nature of what is meant by "effective learning" and the characteristics of schools providing it must change. The attainment of basic skills or minimal competencies alone is not adequate. Schooling must develop and support not only the capacities of communication and computation, but also the ability to think critically and creatively; to be flexible and reflective; to engage in respectful discourse; to make ethical judgements and act on them; and to develop what early childhood expert Lilian Katz calls "a disposition for learning."

This report is part of the effort by the Council of Chief State School Officers to examine proposals and efforts to restructure schools with respect to their impact on increasing the effectiveness of learning for all students but especially for students at risk. The report reviews the value and potential of various proposals to change the instruction of at-risk students from a pedagogy of minimal basic skills to a pedagogy of learning which is critical, diagnostic, adaptable and long-lasting. It is designed to help education policymakers decide which strategies used in school restructuring efforts are most likely to result in improved student learning.

This report provides the reader with a description of the many existing and proposed projects related to some aspect of school restructuring. It categorizes restructuring attempts, identifies elements within each category and discusses how their restructuring could lead to improved learning for all students. Examples of state or local efforts to design and implement such changes are provided. The report is organized into three major sections. The first examines state efforts to restructure schooling—how states have initiated or supported attempts to improve teaching and learning in fundamental ways. The second section gives a brief overview of similar efforts at the district level. The third reviews several restructuring projects promoted by national organizations and individuals. The sections dealing with state and district initiatives focus on four educational variables:

1. **School Governance**—resulting most often in the decentralization of authority to the school site, and aimed at allowing those closest to the student the flexibility to design the most appropriate education location and practice.

2. **Nature and Organization of Curriculum and Instruction**—changing in ways that provide a creative, flexible, and challenging education for all students, especially for those at risk, not rote learning of discrete facts and an emphasis on basic skills alone.

3. **New Professional Roles for Educators**—permitting professional educators at every level to focus on education success for *all* students and providing the necessary support for education success; focusing on critical and higher order thinking skills, rather than emphasizing compliance with procedures and regulations.

4. **Accountability**—emphasizing performance-based outcomes of a kind that support a pedagogy of thinking and active learning instead of driving an education of minimal competencies.

For some of the examples cited it is not clear what direct effect the restructuring has had or might have on learning. Several cited projects had completed evaluations and could show a link to improved learning, but these were the exceptions. Most had not linked implementation with evaluation and others seemed focused on implementing the particular change on faith that improved learning would follow. One reason for the paucity of evaluation reports is the time required for fundamental change to take hold. Pilot programs or small cadres of persons within schools pushing for restructuring take considerable time to spread through a system or, in the case of a single school, to ever have all staff committed to the desired change.

A central lesson of this wide review of school restructuring is the necessity that instrumental change be guided by explicit goals for improved learning. The goals must include learning of both fundamental abilities and higher order, critical thinking—for all students, but particularly those at risk. Without such goals there is a tendency to focus solely on the changes or means themselves rather than the end.

A. SCHOOL GOVERNANCE

Governance—who makes which decisions—is an element of school restructuring that has received considerable attention from teacher unions, district superintendents, school boards, state legislatures, professional organizations, student advocate groups, and state education agencies. The design of the structure and organization of decision-making has a profound effect on the direction and quality of change for schooling.

Two broad strategies have emerged in the debate about accomplishing changes in authority and governance patterns. The first strategy attempts to shift authority from the district to the school site (and possibly democratize its exercise). The other strategy, according to those who argue in its favor, aims instead at more direct individual empowerment by giving teachers the right to choose or develop the programs in which they work, and families the right to select the school that best suits their child. Below are descriptions of both strategies and examples of efforts in various states to enact them.

1. Decentralized Authority/Site-Based Decisionmaking

A broad array of educational organizations (e.g., Education Commission of the States, National Governors' Association), district superintendents (e.g., Miami, Rochester), researchers (e.g., O'Rourke, 1987; Sirotnick and Clark, 1988; Tucker and Mandel, 1986) and teacher unions (e.g., American Federation of Teachers, National Education Association) emphasize the need to shift much of the current decisionmaking regarding the day-to-day activities of schools from the district central office to the school building. This decentralization of decisionmaking is aimed at giving those closest to the students the flexibility to design and implement the most appropriate educational environment and practice.

Proponents of site-based management posit that in order for schools to meet the variety of needs of students, the organization of the school must be sufficiently flexible so as to adapt to serve students appropriately. Decisions about how instruction is organized, and related decisions about curriculum selection and development, staffing arrangements, decisionmaking structures and processes, staff and organizational development needs, and budgeting should be made at the building-site (Cohen, 1988). Teachers, building administrators, and other staff within the school best understand the specific needs of the students and the particular mixture of opportunities and barriers existing in the community, according to arguments favoring school-based management.

In and of itself school-based management may do little to alter the decision-making process within the school. School-based management merely identifies the locus, not the structure or effectiveness, of the decisionmaking process. It means that decisions about most elements of school operation are made at the site rather than at the district office or the state department of education. School-site management can range from a hierarchical, autocratic decision-making structure with the principal making all decisions to a flattened democratic hierarchy where decision-making is shared among all school personnel and sometimes selected parents.

Once it is determined that the school will be the site of decisionmaking the next issue has to do with the kind of decision-making and the structure of authority within the school. One approach increasingly identified with site-based management is shared decisionmaking. Shared decisionmaking, at its most basic, means that a group within the school shares authority for a variety of management and administrative responsibilities. Frequently this group is composed of building administrators, teachers, other staff, and sometimes parents. How this authority is shared, among whom, to what degree, and about what issues can differ markedly among schools with "shared" decisionmaking.

In practice, school-based management—overseen singularly by a principal or more democratically by a school team—involves responsibility over a broad range of issues. These may include different combinations and degrees of the following: how subject matter in the classroom is determined; how students are assigned to classes; how classes are organized; how the roles of teachers, principal and other staff are defined; and how such formal processes as budgeting, hiring and evaluation are determined and organized (Cuban, 1989).

State Sponsored Local Projects

a. Colorado: Creativity Schools Initiative
In January 1989 Colorado announced a plan for the creation of up to twenty "Creativity Schools." The goal of this pilot effort is to allow school communities to better address problems they consider most critical, in ways tailored to their needs and abilities. These schools, named in June, each received a grant of $5,000 and are freed from state regulations in order to experiment with new arrangements of time, instructional staff, and administration. In addition to the requested waivers and small grants, the designated schools are eligible for technical assistance to aid them with the implementation of school restructuring proposals.

The stated mission of the Creativity Schools Initiative is to:

- Encourage education in Colorado which teaches children to think and use their minds well;

- Encourage parents to get involved in their children's education;

- Engage the community as participants in education instead of as spectators to it; and

- Encourage all Colorado citizens to think about the strengths and weaknesses of the present educational system and how it might be reorganized.

When schools apply to become Creativity Schools, they must address not only the established state goals of increased graduation rates, attendance rates, and student achievement but must also describe the composition of their local planning group. This group must include teachers, school principal, parents, business people, students, and community leaders. The plan must first be approved by two-thirds of the faculty, the local school board, and the school accountability committee.

With support from the Governor, the teacher unions, the State Board of Education, business community, and the professional educational associations, the Creativity Schools program is designed to allow maximum local decisionmaking regarding the structure of schooling based on particular local needs.

b. **Maine: Restructuring Schools Project**
Maine's Department of Educational and Cultural Services has undertaken a three-year effort to identify and support ten schools willing to alter in fundamental ways the structure of their present learning environments. MDECS awarded three grants of $50,000 for each of three years and seven grants of $10,000 renewable annually to support schools' efforts to develop and implement restructuring plans. Central to the Maine School Restructuring project is the belief that school staff and local community members know best what is needed in individual schools and dramatic improvement is possible only if decisions regarding change are made at the school-site.

Grant proposals were required to address:

• Vision: a description of how the project will impact on students and how the essential structures of the school will be affected, as well as the rationale for the vision.

• Planning: a definition of the planning process thus far and for the future, demonstrating the involvement and the support of all constituencies.

• Organizational capacity: a demonstration that the organization has the capacity to carry out the restructuring effort, including resources available and climate for change.

• Implementation plan: a description of the goals for the three years of the project and a detailed action plan for the first year including a budget.

One elementary school, one middle school, and one high school were awarded $50,000 grants. The elementary school is developing the school as a "Center of Inquiry" in which teachers reflect on their practice and model the behavior they expect of their students—thus becoming scholars of and leaders in the change process. The middle school is exploring flexible scheduling, interdisciplinary and activity-based cooperative learning as well as integration of special education into the mainstream program. The high school is focusing on cooperative learning and the coordination of technical and academic courses. It is also developing a curriculum based on the College Board's Equality Project requiring students to graduate with demonstrated competencies.

The seven smaller grants were awarded to schools considering a variety of restructuring elements including mechanisms for collaborative decision-making, flexibility in scheduling to allow students a variety of educational experiences, and professional development, among others. All schools receiving grants became members of the Maine Restructuring Schools Network.

c. **Massachusetts: Carnegie Schools**
In January, 1988 the Massachusetts Legislature passed Chapter 727, An Act Enhancing the Teaching Profession and Recognizing Educational Achievement. One provision of the Act was the establishment of the Carnegie Schools Program. As stated in the legislation, the intent of the program is:

• To encourage the public schools of the Commonwealth to plan and develop innovative organization and management systems at the school building level, to produce better learning opportunities and to empower public school professionals.

• To encourage and support the development of management systems that provide increased autonomy and discretion for school-based professionals and encourage innovative organizational strategies to enhance student learning.

After reviewing 38 proposals from schools and districts the Department of Education awarded seven sites planning grants totalling $210,000. In their proposals the schools were required to describe their "vision" for the school, the intended model of shared decisionmaking, the type of restructuring desired, the plan for implementing changes and estimated costs for one year's activities. They were also asked to detail the type of planning used to prepare the proposal. In order to submit a proposal each school formed a school/community planning team comprised of the principal, at least five teachers elected by their peers, two other school professionals, two parents, a community representative and, in secondary schools, a student elected by peers. The grant will support one year of planning by teams organized to propose changes in the school's organization and governance, improve instructional strategies, upgrade its curriculum, develop better community links, and sharpen staff development.

The goal of the Carnegie School Program, according to the Massachusetts Department of Education, is to establish educational models which: restructure the environment for learning and teaching; foster professional autonomy and accountability, goal setting, and evaluation of the success of schools; provide a variety of approaches to school organization, leadership, governance, and the involvement of parents and the community; and provide teachers with the resources needed to be more effective and productive.

In one of the Carnegie middle schools nearly 100 sixth grade students will participate in a new "cluster" arrangement next year which will enable teachers, parents and resource people as teams to deal with student strengths and needs. In an elementary school elected students representing each class are gathering in a "constitutional convention" to draft a school constitution. In an alternative school—also a Carnegie site—efforts are underway to have school staff and parents share equally in deciding school policy issues.

After the year of planning, each Carnegie school will submit its plan to the local school committee and then to the state Board of Education. If their plan is approved, the school will receive a three-year administration and implementation grant.

12

d. Michigan: School Redesign/ Restructuring Grants

The Michigan legislature recently approved two initiatives intended to allow school districts and individual schools to experiment with new organizational arrangements within schools to improve student learning. The first program provides two million dollars to districts for innovative educational programs. An eligible school can receive up to $50,000 for a pilot program to improve school performance by restructuring the educational delivery system.

The second appropriation totals two and a quarter million dollars and is planned for intermediate school districts and consortia of local and intermediate districts. Funds will provide support services for developing and adopting long-range school improvement plans; adopting a core curriculum as a means of raising academic standards and improving school accountability; and writing and disseminating an annual education report. Each district is eligible to receive a minimum of $640 per classroom building.

e. South Carolina: Target 2000

New legislation in South Carolina—Target 2000: School Reform for the Next Decade—builds on its well-known Education Improvement Act predecessor and contains essentially two references to school restructuring. An important aspect of the legislation features the concept of school restructuring as a reward or incentive. If a school shows gains on two sets of standardized tests that place it in approximately the top quarter of schools with similar socio-economic characteristics, then the school would be exempted from compliance with regulations including but not limited to those dealing with class scheduling, class structure, and staffing. This status would also grant additional funding for technical assistance, planning, and implementation of the school's proposed restructuring. If a school can show such gains over a two-year period it becomes eligible for the special waivers and funding.

Schools that earn this special status would be permitted to conduct restructuring experiments that might include:

- Replacing fifty-five minute class periods with two-hour blocks of time several times a week to allow for more indepth treatment of a subject;

- Shifting staffing patterns to create larger classes for lectures and smaller seminars for discussion groups; or

- Grouping students according to their skill and knowledge, rather than age.

South Carolina Governor Carroll Campbell is quoted as predicting that nearly one-fourth of the state's 1,100 schools would possibly be exempt from state regulations. A state Senate report estimates that 291 schools would qualify for exemptions under the bill. ("South Carolina Considering 'Flexibility' for High Scoring Schools." *Education Week*).

A second part of the South Carolina Legislation relates more to the efforts about changes in curriculum and instruction but is included here as part of the South Carolina initiative. Titled, "Emphasize Greater Understanding by Students of a Variety of Subjects Beyond Basic Skills in Order to Achieve Higher Order Thinking Skills and Creativity", this legislation calls for an emphasis on higher order learning throughout the educational system. By 1991-92 students enrolled in teacher and administrator training programs will be required to complete training and teacher development experiences in teaching higher order thinking skills.

The state is directed (by 1993-94) to create an instrument to evaluate teacher practice in the areas of higher order thinking skills. In several places the legislation points out that higher order thinking skills may not be excluded from programs for students at risk. The state is also required to assess textbooks, standardized tests, and achievement tests for how they support and assess the development of higher order thinking and problem solving skills. A related requirement involves a review of assessment methods different from traditional achievement tests. Within the next five years all teachers in the state are required to undergo in-service training regarding the teaching of higher order thinking and problem solving skills.

f. Virginia: Restructuring Education in the Middle Grades

Virginia has emphasized the needs of middle school students (grades 6-8) in its school restructuring effort. The Virginia Department of Education identified four model middle schools in June, 1988 and awarded $200,000 in state funds to each school to support equipment, program, and dissemination needs associated with

its role as a model site. In a related program, Virginia has named twenty-five "Vanguard Schools" which will assist other schools planning significant change by operating as demonstration sites of exemplary teaching in grades six through eight. Vanguard schools receive no special funding.

The Virginia Board of Education has called for all school divisions to develop, implement, and evaluate plans for improving grades six through eight by the 1993-94 school year. Schools are to make use of exemplary curriculum, teaching practices, and organizational arrangements. The Model and Vanguard middle schools are part of a mandated school restructuring process which will result in the restructuring of all Virginia public schools which have grades six, seven, or eight. School-based task forces will study research on the education of early adolescents, develop a restructuring plan, and implement it over a five-year period. Statewide implementation will be phased, with the last group of schools scheduled to complete their efforts in 1997. The stated aim of the Virginia middle schools program is that "all students will be successful learners, and that schools attended by early adolescents will have curriculum, instruction and organization appropriate to their students' developmental characteristics."

g. Washington: Schools for the 21st Century

In 1987 the Washington State Legislature funded the Schools for the 21st Century program. The intent of the program, according to the legislation, is "to encourage educational creativity, professionalism, and initiative by: a) providing schools an opportunity to develop new methods and procedures, through the temporary waiver of certain state statutes or administrative rules, and b) providing selected public schools or school districts with the technology, services, and staff essential to enhance learning."

Twenty-one projects were selected by the Washington State Board of Education as program participants—nine elementary schools, one middle school, five high schools, four school districts, and two additional projects—Bethel Extended Learning (programs for at-risk students) and a network of twenty-one schools and two alternative programs in Seattle.

Funds are available to support supplemental contracts to teachers for a minimum of ten days beyond the normal school year. Other monies are provided to support projects such as technical assistance and staff development. Waivers from certain state regulations are permitted. Depending on legislative appropriations, participating projects receive state financial support for the period of time specified in their applications.

Proposals from the twenty-one projects range from an elementary school that plans staff training to improve teachers' understanding and use of computers, provision of computers to teachers for their home use, training for parents to increase their participation in the school, a study regarding the provision of in-school day care, and the upgrading of the physical plant; to a middle school planning to restructure its entire program and develop an outcome-based, mastery learning model. The middle school proposal contains plans for restructured grouping of students, interdisciplinary teams of teachers, a variety of assessment methods, an emphasis on higher order thinking skills, use of cooperative learning, and several types of tutoring and computer assistance for accelerated learning.

h. Other State Initiatives

Several other states have developed statewide school improvement efforts. In 1989 the **Florida** Legislature appropriated $1 million for incentive grants to be distributed to school districts for the purpose of funding restructuring initiatives. Several Florida school districts have initiated a variety of school restructuring experiments and the new state monies are designed to encourage additional ventures. The State Department of Education has documented current school restructuring projects throughout the state as a resource to other districts. The Department has also conducted elementary school team training for the last two summers. Two hundred of the 1,300 elementary schools in the state have sent teams of principals, teachers, and district staff. These teams develop school improvement plans.

In a **Kentucky** school finance suit filed by over fifty property-poor districts, the state supreme court struck down the state's school-finance laws and went on to reject "the whole gamut of the common school system" in Kentucky ("Lawmakers Floating 'Radical' Ideas to

Shift Control of Kentucky Schools." *Education Week*). A Task Force on Education Reform in the Legislature has considered a wide range of proposals in its effort to craft a new school system, some of which could radically alter the control of schools from local districts to the state. The redesign process is still in its early stages. A state Council on School Performance Standards, at work before the court decision, has developed a plan calling for dramatic changes in the structure and content of Kentucky educational curriculum, instruction and assessment. Details of the plan are described in the next major section of this report.

Michigan recently announced two statewide grant programs to assist school improvement efforts. The School Improvement Planning Grants program makes $2.1 million available to school districts for the development of three- and five-year school improvement plans and adoption of a core curriculum. The School Redesign/Restructuring Grants program provides $2 million for local and intermediate districts. Districts will compete for grants to support planning or implementation of creative ideas and innovative educational programs that will improve student learning. Both programs are operating during the 1989-1990 school year.

Minnesota's Educational Effectiveness Program (MEEP) is a school-based improvement program begun in 1984-85 with twenty-six pilot schools and has added approximately 100 new sites annually. Currently 503 schools participate as program members. The Minnesota effort centers on training of school leadership teams (composed of teachers, principal, representative from the central office, and may also include parents, other school staff, school board members and students). The teams work as school planning groups.

New Jersey supports collaborative planning at the school site for mastery of basic skills by all students in its City Schools of Excellence, a program of state assistance for fifty schools. School improvement efforts center on action by teams at each school which include the principal, a representative number of teachers, support staff, parents, community representatives, and sometimes students. Team plans must include measurable outcomes and periodic evaluations. Small yearly grants ($10,000-30,000) serve as incentives for school participation.

West Virginia initiated a statewide program designed to support the development of thinking skills by its students. The "West Virginia Challenge" stresses problem-solving techniques and scientific reasoning in basic instructional areas. West Virginia Challenge has four components: Academic Challenge, the Thinkers' League, Choose the Challenge, and Target Challenge. The Academic Challenge and the Thinkers' League use computers and academic games as tools to implement critical thinking in the classroom. The Choose the Challenge component is an effort to expand the thinking and learning process into the community and the Target Challenge represents evaluation of the entire program. The project is designed to be a cooperative effort of the county school systems, the Governor's Office, the West Virginia Department of Education, the West Virginia Humanities Foundation and other interested groups.

The **Wyoming** Department of Education currently operates its Super School program which provides grants to districts involved in implementing innovative practices. Under the direction of the state superintendent, schools which meet specific criteria are offered rewards and incentives for exemplary programs. Incentive grants of up to $10,000 are available to schools which identify goals and activities that lead to change; these are renewable annually for three years. Recognition grants are awarded each year to schools that have already implemented such changes and continue to work toward specified objectives.

Grantees have developed programs in career education which have established partnerships with community colleges and businesses to provide more extensive instruction and work experiences. Vocational teachers are team teaching with core-curriculum academic instructors in math, science and English to better prepare students for the world of work. Other Super Schools are working toward instructional practices to encourage cooperative learning techniques, to adapt to the different learning styles of students by creating appropriate environments within the classroom, and to move away from basal texts to literature-based instruction and the whole-language approach to learning.

In the spring of 1990, this program will more directly address restructuring by asking schools to submit grants identifying how school operations will focus on improvement of student performance through development of new methods and procedures. It will enable educators and parents at the local level to develop model school programs that will effectively prepare students to meet the requirements of the 21st century. The aim of the program is to encourage educational creativity, professionalism, and initiative. This program will be called Schools for the Second Hundred Years.

2. School Choice

A second governance strategy regarding the restructuring of schools and improved learning has to do with the right of parents to choose the school which their child will attend. According to certain advocates of choice, by giving the "governance" and subsequent accountability of schools directly to parents, schools will earn their enrollments by providing a wider range of educational program options. The factor of choice will, the argument continues, force poorly performing schools to improve which will raise the quality of education across the district in a classical economics market model, or those schools will disappear.

There are multiple strategies of choice, however. The concept is used to describe a wide variety of systems: open enrollment, controlled choice plans, magnet school systems, alternative concept schools, charter schools, or unzoned schools. For the purposes of this report, school choice programs—seen as state efforts to restructure schools—are divided into two categories: statewide choice programs and restricted interdistrict choice programs.

a. Statewide Choice Programs
Statewide choice programs include a number of different approaches: interdistrict school choice, special programs for at-risk students, post-secondary education programs and specialized schools. Examples of each approach are provided below. The first of this list, statewide interdistrict school choice, is the current subject of intense national discussion and debate. Four states have instituted interdistrict choice programs so far: Minnesota, Arkansas, Iowa and Nebraska.

School choice proponents note several reasons, both pedagogical and more broadly cultural, for expanding public school choice and making it available to more parents. Pedagogical reasons include:

- Students learn more if schools accommodate their different ways. Choice can allow access to a greater diversity of approaches.

- Schools with a clear educational mission, a coherent approach to instruction, are more effective.

- Teachers with freedom to make professional decisions—and have accountability for results—bring more energy and creativity to the classroom.

- Students and their parents are more committed to the educational mission of the schools that they have chosen. (Glenn, 1989).

Serious questions remain, however, about whether school choice plans may exacerbate racial and social class separation and so work against educational equity. Elmore (1989) points out that the test of whether choice programs "work" is not just whether they improve the responsiveness and performance of the public school bureaucracy but also whether they solve certain design problems inherent in choice policies. He explains that the design issues can be categorized under three headings:

- **Choice operates from both the demand and supply sides, but policies typically focus more on demand than supply.** Elmore notes that failure to provide increased supply-side choice for educators—in what they teach, which schools they affiliate, and with substantial infusion of new knowledge—will result in predictable problems. For example, if educators develop learning alternatives from their immediate experience, without considerable new information, then the programs they create are likely to be more similar than different.

- **Choice affects those who actively choose, but it also affects those who, for one reason or another, do not choose. Choice policies are typically designed with more attention to their effects on active choosers than on inactive choosers.** Choice policies may have a negative impact on inactive choosers and on society at large. They may result, for example in the siphon-

ing off of talented students and concentrating low-achieving students in a few schools, or by allowing low-quality programs to persist because they have a loyal following (Elmore, 1988; Levin, 1987).

- **Policy decisions on choice are almost never decisions about whether to allow choice or not to allow it, but rather how existing structures of choice can be altered for certain purposes.** Thus, in order to understand the effects of choice policies, it is necessary to understand how existing choice options are altered, not just what new choices are available.

In a highly differentiated state—one with a wide variety in the quality of schools and student needs—several problems need to be simultaneously addressed if statewide choice is to be equitable. Building-level educators would need the ability and the necessary resources to adjust their programs to be "competitive," while still meeting the diverse, and sometimes expensive, needs of all groups of students. Staff in these schools would need appropriate training in order to accommodate effectively all students' needs. In other words, because schools are not truly "free" in the market sense to change—they are public institutions, not private ones—care must be given to ensure that choice programs are designed in a way that anticipates both the supply and demand aspects of an educational market. Not only must parents have the opportunity (and sufficient information and means) to choose from the demand side, but schools must be improved and restructured sufficiently to ensure an adequate supply side. Otherwise choice is severely limited to the fewer good schools and the creation of a competitive market among public schools will not adequately address the needs of students at risk, many of whom most likely will be confined to the unimproved schools.

In a chapter of a book about school choice, written as a hypothetical memorandum to a chief state school officer, Charles Glenn, Director of the Massachusetts Bureau of Educational Equity, offers advice about the implementation of a school choice policy. In the memo Glenn addresses issues of equity, quality of educational programs, participation by all interested parties, differential impacts on schools, and questions about transportation costs.

A school system seeking to create a policy that provides school choice and balances important considerations of fairness, clear communication, school autonomy and diversity would include the following according to Glenn's advice to a state superintendent:

a. We should make very explicit what every school will be accountable for teaching to its students.

b. We should examine our requirements, regulations, and operating procedures to see which of them get in the way of a legitimate diversity at the school level.

c. Local or regional school authorities should develop fair and simple procedures for assigning students, respecting parent choice so far as is consistent with other important considerations. We should provide advice and assistance, and also review the procedures to assure that they will promote equity and prevent segregation.

d. Local or regional school authorities also should make an effort to find out what parents are looking for beyond the basic requirements, whether:
 • a particular teaching and learning style
 • supplemental programs
 • school climate
 • an approach to the development of character or other elements of education.

e. We should help local school authorities to provide substantial time for teacher planning at each school, with a challenge to develop a distinctive approach to excellence.

f. We should provide resources for but also insist upon effective outreach to parents, to assure that every parent has the information and counseling to make sound choices.

g. We should also insist that each school system develops a fair and easily-understood process for making school assignments, and for handling appeals by disappointed parents.

h. We should help school systems to manage the impact of parent choices upon individual schools, including efficient management of available resources and respect for teacher contract provisions.

i. We should encourage advance planning for transportation, as appropriate on a regional basis, and patterns of recruitment and assignment that use transportation efficiently (Glenn, 1988).

Glenn argues that the correct role of the state is not to prescribe the details of how schools of choice should operate, but to watch for emerging patterns that suggest that educational justice is not being well served.

Charles Willie, in an essay which describes the model of limited choice, echoes the need for fairness and equity. The fundamental grounding of limited choice must be fairness in Willie's judgement. The details of limited choice plans grow from that assumption and in the passage below he lays out what should be the overriding concern of education decisionmakers.

Effective education is a complex of characteristics that involves both giving and getting. If choice in education enables individuals and/or groups to get their fair share but to deny to others their fair share, it is of questionable value. If choice in education enables individuals and/or groups to maximize their benefits but to minimize those of others it is not equitable. If choice enables individuals and/or groups to hoard opportunities without giving compensating advantages to those who have missed out, it perpetuates self-centeredness and a sense of entitlement. In other words, choice must be equitable and fair for all racial and ethnic populations and must fulfill the principle of complementarity. (Willie, 1989).

Minnesota was the first state to develop a comprehensive, interdistrict, open enrollment plan. It should be fully implemented in the fall of 1990. This plan is the result of a gradual expansion of student transfer policies over the past two years by the legislature. In 1987 the plan—School District Enrollment Options—permitted voluntary participation with the resident district retaining the choice of veto. The next year the plan was expanded to include comprehensive enrollment options with no resident district veto except in those instances where the impact on desegregation plans would be negative. The plan becomes statewide and mandatory in 1989-1990 for all districts with more than 1,000 students (districts may establish the number of students they will admit).

The Minnesota plan permits parents to choose the school their children attend. In those cases where students must cross district lines for the desired school, students do so without paying tuition to the new district. Every year Minnesota sets a statewide per pupil spending amount (approximately $3,600) which will "follow" the student to the district chosen for school attendance. Revenues in each district which are collected from "excess levies" will not transfer with the student. One very difficult issue for all states considering interdistrict choice plans is the problem of compensation for the frequently wide disparities in per pupil spending among districts.

The receiving Minnesota district is responsible for transportation costs from its border; parents are responsible for costs to the district line. Low income families may apply to the non-resident district for state transportation funds, but limited funding is available.

According to a New Jersey State Department of Education (1988) report on school choice, of the 227,000 eligible students in Minnesota, 135 students participated in the choice program in 1987-88. During the second year (1988-89) of voluntary participation 153 districts took part and 435 students changed districts.

The first year of mandatory participation (1989-90) for districts of 1,000 pupils or more, 134 districts of less then 1,000 pupils have chosen to participate. The 300 participating districts have approved close to 3,700 applications, which represents five tenths of a percent of the eligible students. Only two districts experienced major losses of students to neighboring districts. In an example cited in Education Week ("Iowa, Arkansas Enact 'Choice'; Proposals Gain in Other States"), one small school district—Mountain Iron-Buhl—319 of the district's 1,074 students had requested transfer causing $1.2 million to be cut from the Mountain Iron-Buhl district budget. A recent change in the law now requires students accepted in a non-resident district to attend for one full year.

Arkansas, Iowa, and Nebraska are three other states preparing to implement statewide interdistrict choice plans. Arkansas's law is based on Minnesota's model and will permit student transfers in the 1990-1991 school year.

Iowa, taking lessons from the nascent Minnesota program, has enacted a similar program but has tried to create a system with greater stability and avoid the experiences faced by the Mountain Iron-Buhl district. Iowa has added a feature which allows parental choice only once every four years per student. Like Arkansas the Iowa plan permits transfers in the 1990-1991 academic year.

In at least fifteen other states legislators and governors are considering interdistrict open enrollment plans and at least six additional states are discussing choice programs which are less comprehensive and restrict choice to specified groups of students.

In addition to interdistrict open enrollment, states provide other kinds of statewide programs under the rubric of choice. One model of statewide choice involves special programs for students who have been placed at risk to school success (usually organized by the district but some operate with special state funding).

Minnesota and **Colorado** permit at-risk students and students who have dropped out to choose among and attend a wide variety of schools within the state. Another model of choice permits certain high school students (usually juniors and seniors, and in several instances those students who are at risk of dropping out) to enroll at post-secondary institutions. Students may attend, if accepted, institutions of higher education full-or part-time. Minnesota's Post-Secondary Enrollment Options program had 5,400 students participating in the 1987-88 school year. (Minnesota reports that 73 percent of participants were seniors and 27 percent juniors; also 64 percent of participants were female and 36 male.) The Education Commission of the States (ECS) reports that six states have post-secondary options available for students: **Colorado, Florida, Maine, Minnesota, Utah,** and **Washington.**

One last choice program which deserves mention is the statewide specialized school. Frequently these schools focus on mathematics, science, or technology. Others, called governors' schools, provide advanced or specific programs for high school students. While they frequently enjoy high publicity and

status, their limited enrollments allow only a few students to attend. Technically they are schools of choice, but a choice available to few families.

Alabama supports a statewide High School for the Performing Arts; **Illinois** has established a statewide magnet school which emphasizes mathematics and science; **Louisiana** supports a public residential school for math, science, and the arts; **Mississippi, North Carolina,** and **South Carolina** each support a statewide magnet school for math and science.

b. Restricted Interdistrict Choice
The state efforts described above to implement school choice are limited to those examples that are statewide and involve at least potentially, all districts within the state. There are, however, experiments with school choice which are restricted to a limited number of districts. These efforts are of two kinds: multiple district programs and urban-suburban district partnerships.

New Jersey provides a good example of a multiple district choice program. Under a new plan announced by Governor Thomas Kean—although not yet funded—six districts will be chosen to participate in the program and will receive state grants to change their schools into magnet programs. Families in those districts will be able to choose any school within their district. According to current plans, in the initial year state grants would total $50,000 for one magnet school, $75,000 for two, and $100,000 for three or more. In the second and third years the grants would increase by $100,000 each year. These monies would also assume transportation costs for travel across the district. Kean's new program additionally includes a "second chance" component for a limited number of dropouts to return to the school of their choice (expanding an existing program), and a third aspect provides post-secondary options for high school juniors and seniors.

Several states have urban-suburban partnerships, virtually all of which are the result of desegregation plans. One such setting is Milwaukee, **Wisconsin** which, under a 1976 federal court desegregation order, created a program which focused inside the district and permitted choice among neighborhood schools, magnet schools, or any other district school if that choice enhanced integration. A later pairing of Milwaukee

with nearby suburban districts volunteering to participate permitted students from the urban and suburban districts choice of schools within desegregation restrictions. At first eight suburban districts participated. The New Jersey paper on public school choice noted above reports that in the first year eleven suburban students attended Milwaukee city schools while 323 city students chose to attend suburban schools. The report also points out that since a 1987 court settlement in Milwaukee there is full suburban participation in the interdistrict program so that suburban districts must provide space for Milwaukee students and remove any inequitable screening procedures or practices (twenty-three suburbs are involved representing over 1,000 students attending Milwaukee schools and 4,300 city students attending suburban schools). Thus far Milwaukee schools are not entirely desegregated.

Other examples of desegregation-driven urban-suburban choice programs include Boston, Massachusett's Metropolitan Council for Educational Opportunity (METCO); Rochester, New York's urban-suburban scheme; and the St. Louis, Missouri program.

Poor desegregation results and high transportation costs plague the St. Louis effort. In the early 1980's the magnet school plan in that city was designed to draw 6,000 suburban students into city schools. The integration goal was later amended to 1,640 suburban students. In 1988 only 600 suburban students along with 7,400 St. Louis students crossed district lines to attend school. This enrollment pattern leaves the St. Louis district's magnet schools with a ninety-two percent enrollment of black students (New Jersey State Department of Education, 1988).

Boston's METCO program, begun in 1966, is a voluntary, urban-suburban, alternative public school placement for black, Hispanic, and Asian-American students in that city. From an initial enrollment of 220 students in seven suburbs, METCO has grown to serve 3,250 students in thirty-five participating metropolitan districts.

Rochester, New York began with magnet elementary schools in 1978. It expanded in 1980 to include magnet schools at the middle and high school levels as well as a voluntary desegregation plan of open enrollment and an urban-suburban partnership.

Evaluations of these programs stress success or failure in desegregation. It is very difficult to identify research linking specific enrollment models of this sort with improved student achievement, particularly of learning characterized by higher order learning.

B. STATE REFORMS ON THE NATURE AND ORGANIZA- TION OF CURRICULUM AND INSTRUCTION

What students are expected to know and be able to do, how knowledge is organized for student learning, the kinds of instructional methodologies employed, how school time is structured, and the relationship of student grouping to learning are all critical variables concerning the nature and organization of curriculum and instruction. For too long these variables have been perceived by many policymakers and educators as constants—unchangeable—that is, traditional schooling has taken on a standardization which has remained long unchallenged. If schooling is to be restructured for improved learning, then it must be challenged. That challenge is particularly important now, given the changing demands placed on students as they leave school and, as adults, face the responsibilities of family, citizenship, and work at the end of this decade and into the next century.

Educational Goals and Expectations
Crucial to restructuring schools for improved student learning is a redefinition of educational goals and objectives. Education's goals need to be rec efined given the needs of students and the changed demands of society and the workplace. Once a school system has set its educational mission and objectives, then individual schools can craft their educational practices in light of larger goals, but appropriate to local conditions. Educators need clear and sufficiently broad educational guidelines regarding what all students should

know and be able to do upon graduation. Cohen (1988) proposes that states assume larger responsibilities for setting educational goals and defining outcome standards. He argues that this is a critical precondition to providing greater discretion and flexibility at the school site. The curriculum and state testing and assessment programs must then be linked to the goals. Goals and related objectives should set standards for an educated ethical citizen, not specific minimal competencies. At least as important as state goals which set expectations for schools are the expectations educators hold for students.

Educators who have applied the most knowledgeable strategies for learning—including the provision of compensating personal support to those students needing it—have shown that all students can respond successfully to much higher standards. Too frequently, disadvantaged students are burdened further by policies that underestimate their capacity to learn and by classroom environments that slow rather than support the development of higher level intellectual skills. Any vision of a changed system must include a belief in the capacity of all children to respond successfully to excellent instruction (CCSSO, 1989).

Organization and Kinds of Knowledge
How questions about educational goals are answered, to a considerable degree, determines what knowledge is considered important for students to learn. These answers also influence how that knowledge is organized, how it is presented to students, and what students must do with it to show academic success. There may be an emphasis on coverage of facts (e.g., a select collection of discrete events placed in chronological order in the study of history) with little depth of analysis about why those particular facts were chosen, or an emphasis on substantial understanding of process and causation (e.g., the interaction of economic, political, sociological, religious, cultural, and psychological forces over time and their effects) related to a few key events.

Sometimes, however, those "facts" are misleading. Gender, race, and social class biases—by distortion or omission—have been documented in textbooks across subject areas (Anyon, 1979). The cultural, intellectual, economic and political influences and contributions of all groups need to be acknowledged in ways that are both accurate and relevant to the students involved in their study.

In addition to issues of breadth/depth and content of what students are taught, the organization of knowledge into hierarchies is also a serious concern. This creation of a hierarchical difference in knowledge—and who has access to what level—is a central issue in the education of students at risk to school and later success.

In the effort to improve education for students placed at risk, programs have been designed typically with an emphasis on ensuring that these students develop facility in basic skills. This approach is based on the belief that students who are academically behind their contemporaries should be provided with special services which will ensure, at very least, that they are able to read and compute at a rudimentary level. There is, however, a growing literature that criticizes these programs on the grounds that an emphasis solely on minimal competencies and basic skills will, when completely successful, provide students with only the barest essentials of learning (Brown, 1988; Hilliard, 1988; Levin, 1987).

The logic which undergirds the minimal competencies approach is based in the belief of a hierarchical and linear structure of knowledge, thinking, and eventual academic ability. This hierarchy explains success at higher order thinking only by prior mastery of lower level skills and knowledge. Hence, programs for students who have fallen behind their peers frequently stress only the acquisition of basic skills, of fundamental information, and of minimal abilities. Recent research about the nature and process of cognitive development disputes this premise of linear, prerequisite knowledge (Newell and Estes, 1983). In addition to cognitive research, current statistics on educational achievement and observation regarding educational practice and outcomes show vividly that remedial programs based on drill and practice methodologies which solely emphasize basic skills do not result in dramatic improvement in learning. Rather, some research posits that such an approach may even exacerbate the learning difficulties of students and serve to widen the achievement gap faced by students at risk (Levin, 1987).

Recent research in cognitive theory supports the argument that these assumptions are erroneous by showing that young children, even in the first few grades of elementary school, use both basic and higher order skills (Resnick,

1987). The children rely on higher order skills almost automatically, reviewing what they know against new material, making logical jumps and inferences, extending familiar patterns of language and mathematical structures to incorporate previously unknown concepts. Thus, in the effort to improve mathematical and reading skills of children who are below grade level by stressing only basic skills, the higher order abilities are neglected and a critical aspect of children's thinking and skill-building is ignored. Proponents of this analysis argue that the omission of higher order skills and over-emphasis on drill of basic skills has been largely responsible for the poor record of many remedial programs for students at risk. Their argument does not call for the neglect of foundation abilities in communication and computation, but rather an enhancement of these capacities with problem-solving and higher order work.

Instructional Methodologies

A third important aspect concerning the nature and organization of curriculum and instruction includes the manner in which the student interacts with that which is to be learned. Traditionally this relationship has been one where the teacher talks and students listen as a group and collectively move through a preselected body of knowledge or set of skills. Such an approach ignores differences in student interest, development, background, culture, language, and learning style. It also restricts thoughtful conversation and collective, creative work between and among the students. Typically it emphasizes individual passive reception of discrete information rather than active, exploratory learning. This sort of learning is not effective preparation for the 21st century. If students are to be critical inquirers and flexible learners then the pedagogy which prepares them for such conditions must foster those abilities. Teaching can no longer stress recall rather than comprehension, application, analysis, synthesis, and evaluation. Whole group lecture, as the sole means of instruction, is not appropriate for a world that requires dynamic and creative citizens and workers.

Teachers need to become expert not in one form of instruction but rather to have available to them a repertoire or menu of pedagogical methods from which they might draw as appropriate. Students can benefit from a combination of instructional approaches including lectures, Socratic questioning and dialogue, as well as supervised practice (coaching) in a wide range of disciplines involving reading, writing, speaking, listening, calculating, problem-solving, observing, measuring, estimating, and exercising critical judgement (Adler, 1982).

Tutoring methods (whether provided by the teacher, another adult, an older student or peer) have been shown to be effective and might involve either printed materials or computer-assisted instruction. Slavin and Madden (1989) have reviewed several effective learning programs and provided a comparative analysis of: continuous progress programs (where students proceed at their own pace through a sequence of well-defined instructional objectives); remedial tutoring programs; computer-assisted instruction programs; and cooperative learning (where students work in small learning teams and are rewarded based on the individual learning of all team members). Their study recommends the most effective use of each of these four approaches— and emphasizes success with improved learning for students at risk.

Structure of Time

In classic educational research studies, time-on-task is considered a central issue related to student learning. The relationship of time to achievement has been researched since the 1920's; the most influential study on the matter has been Carroll's School Learning Model (Carroll, 1963) which treats learning as a function of time. The model considers learning to be directly influenced by the time that students need to learn, the quality of instruction given, as well as the time students actually spend on learning (Montero-Sieburth, 1989).

The ways in which time is structured in schools—the number of school days in a year, the number of hours in each school day, the proportion of a school day that is dedicated to particular subject matter, and the pattern by which students progress through formal schooling— combine in ways which place a variety of parameters upon what can be taught and how. Time is typically treated as a fixed resource with very little opportunity for flexibility and variation. At virtually every level—life of student, school year, day, class—time is used in remarkably similar ways in extremely different settings around the nation. Despite enormous (and growing) variation in student learning needs, urban/rural density, time constraints on families, student employment, student parenthood, and dangers/opportunities to students outside of school buildings, school time is organized almost exactly the same in each of these settings.

Generally speaking, in spite of a tremendous range of student need, time is allocated almost exactly the same to all students and all teachers in all schools. Time has been treated as both a fixed and universally-applicable resource. When time-on-task is identical for all, students are required to learn the same content at the same rate. This point alone flies in the face of a substantial body of educational and psychological research which says that students learn at varying rates and in different ways. The result of this monolithic structure of time (and resultant structure of knowledge in units) is that over the course of students' experience in formal schooling, they are expected to master knowledge and skills at a steady rate, in constant blocks of time, simultaneously with their entire age cohort, in a linear progression, and succeed at graduation with similar academic achievement.

The nineteenth century factory model upon which this system is patterned is wholly inappropriate for late twentieth century schools trying to educate all students in foundation and higher order capacities. Twelve or more years' experience in a setting with such inflexible time results in devastatingly wide variation of student learning outcomes. In this approach learning has become subservient to schedule.

In dramatic contrast to an approach which treats time as a fixed and constant resource are educational programs which emphasize outcomes of improved student learning where time is a varying, flexible, and supportive resource. In this latter instance, time is varied allowing students the necessary length and repetition of study to master appropriate knowledge and skills. What becomes fixed are the standards for student learning; what varies are the time-on-task and the number of chances students have to reach the learning standards. Time then becomes a variable instead of a constant.

In a paper that examines the role of parents in assuring educational success in school restructuring efforts, Clark (1989) calculates the number of hours students spend on "stimulating literacy experiences" (e.g., learning-to-learn skills, content thinking skills, basic reasoning skills, communication skills, and emotional and psychological skills) in both school and non-school settings. He estimates that in the typical school day of six hours, high achieving students are "engaged" in literacy stimulation for approximately three-and-one-half hours whereas low achieving students are engaged for one-and-one-half hours. Likewise there is a considerable difference in engagement in literacy stimulation outside of school. Out of the sixty to seventy hours per week available to students outside of school, high achieving students spend twenty-five and low achieving students spend twelve hours on literacy-rich activities.

School and non-school hours combined over a year result in a difference of 880 hours between low and high achievers spent engaged in literacy stimulation. The cumulative impact is substantial. Although students spend about the same amount of time in school, by the end of grade six, low achievers may have had the equivalent of 3.7 fewer years of literacy practice (reading, writing, dialogue, computation) than their higher achieving peers. By the time they enter ninth grade this difference may reach 4.8 years (Ibid, 1989).

Two simultaneous approaches are necessary according to Clark. Schools must improve the quality of time spent in the classroom for all students, but especially for lower achieving students, with richer content and more challenging curricula and instructional methods. Secondly, schools must find ways to ensure that students are engaged in desirable literacy experiences beyond the school day and help parents (and other caring adults) properly guide students in literacy-enhancing activities. Perhaps the most striking feature of the research cited in Clark's work is the substantial amount of time available to students outside of school and how it might be used. In the course of one year, for example, he estimates that outside of school time high achieving students are

engaged for 1,000 hours in literacy-rich activities but low achieving students have spent only 480 hours in such activities. Schools need to become significantly more effective in parent outreach and subsequent parent empowerment focusing on improving student learning.

In addition to creating a range of time structures for instruction and student learning, teachers need to have more flexible time. Teachers, in order to more appropriately and effectively alter their own current practices and learn to work more effectively with parents and community members, need time to discuss, brainstorm, experiment, evaluate, and reflect with their colleagues. Current arrangements of time in most schools tend to isolate teachers and restrict those practices.

Student Grouping
Another important feature of schools related to the nature and organization of curriculum and instruction is how students are grouped for learning. There is sufficient evidence to indicate that grouping has powerful effects upon student achievement (Webb, 1990; Weinstein, 1976). The curriculum, quality and pace of instruction, expectations for student learning and behavior, and the social and learning environment can differ considerably among groups— ability groups within elementary classrooms or high school tracks (Biddle, 1979; Brophy et al., 1981; Edmonds, 1979; Oakes, 1985). Heterogeneous grouping can make such differential teaching less likely.

Teaching solely to classroom-size groups of students limits instructional variety. Instruction designed for small groups of students, for example, allows teams of students to have the opportunity to learn from each other working cooperatively. They also have the chance to learn to work constructively in a group of peers—a lesson not necessarily related to the specific instructional task, but no less important. Peer tutoring, usually with two students working together, is another possible grouping of students. Individual students might work with computers, pursue detailed research or prepare presentations for their peers.

The composition of the instructional group may also differ by age. In theory heterogeneity is not restricted within age groups, although it is very difficult to cite examples in public schools where

students are mixed by age. Phillip Schlechty, Director of the Center for Leadership in School Reform in Jefferson County, Kentucky, criticized the practice of teaching only in single age cohorts because it limits students from having interaction between and among students across a broader age range. In a mixed-age classroom younger students can learn by observing or being tutored by older students. The older ones likewise can enhance their own self-esteem and sharpen their abilities by providing assistance to younger classmates (Schlechty, 1989). He noted with considerable irony that only within the last two centuries has humankind arranged to educate its young in litters.

In elementary schools that follow the educational methods of Maria Montessori, for example, students are grouped in two classes: students aged six to nine years and nine to twelve years. Presentations of didactic materials are occasionally made to the whole class, but far more frequently, the teacher presents materials to small groups of students. These small groups differ in size and age composition. The teacher also works with individual students. As the students select work, they then proceed in different small groups, in pairs, or individually, as seems most appropriate. The teacher offers advice, occasionally gives direction, and provides additional materials. Unfortunately, despite a recent rise in the number of Montessori programs available in public schools, few at-risk students have access to Montessori classrooms because they exist most frequently in more affluent suburbs. The grouping of students in three year cohorts permits teachers to know students and their families well, and allows younger children to learn from older ones.

EXAMPLES OF STATE REFORMS REGARDING THE NATURE AND ORGANIZATION OF CURRICULUM AND INSTRUCTION

1. Arkansas: Restructuring for Higher Order Learning

In December 1987 fifteen Arkansas school districts accepted an invitation from Governor Bill Clinton to attend a statewide conference, "Schools for Arkansas' Future: Restructuring for Higher Order Learning." The conference brought together school staff, representatives from national educational organiza-

tions, staff from state departments of education, state legislators, and others to discuss the possibility of restructuring schools to provide enhanced learning opportunities for all children.

The school districts invited to participate were selected based on several criteria: the districts had fully met the spirit, not just the letter, of the new education standards for accreditation; the schools had demonstrated progressive educational philosophies; district leaders had a demonstrated commitment to and understanding of participatory, school-site management; school personnel believed that children can learn; and the districts could accomplish the restructuring experiment within their existing budgets.

Each participating district sent a team composed of the superintendent, assistant administrators, local school board members and a school planning team of principals and teachers. The teams met and developed plans to restructure their schools based on known local needs and information provided by a variety of guest speakers. The restructuring plans were to result in initiatives which would redesign schools to become settings where all students would become actively engaged in learning and applying knowledge and skills that enhanced their ability to think and to make rational, viable decisions. The state, in return, pledged to consider removing any state regulation identified by the school team as an obstacle to improving student learning.

In the summer of 1988 Arkansas and four other states joined Re:Learning, the joint educational improvement effort by the Coalition of Essential Schools (CES) and the Education Commission of the States (ECS). As a member of Re:Learning, Arkansas is a national pilot site for school reform. Seven schools in Arkansas are also considering membership in the Coalition of Essential Schools.

The initial success of Arkansas' emphasis on school restructuring for higher order learning will be shown in an evaluation report which should be released in late 1989. This report documents the progress of the fifteen pilot schools which are currently implementing changes in their education programs. The report is described as a candid analysis of the initiation and implementation stages of the restructuring process. The evaluation attempts to answer questions such as:

- What strides have the pilot schools made toward improved schooling—restructuring for higher order learning?

- What barriers have they encountered along the way?

- What roles have local boards, the community, superintendents, principals, and teachers played in the change?

- What direction will the pilot schools take in the near future?

- What lessons have the pilot schools learned that would be helpful to other school's interested in restructuring?

2. California: Curriculum Frameworks/Regional Network

California has implemented a variety of innovative educational reform strategies during the last few years in several different areas—data collection, early childhood programs, and teacher standards/assessment. One area of change that might force, or at least lever, school restructuring efforts is curriculum content, and in particular the design of textbooks. California's curriculum framework is described below as an example of one such effort. A second initiative by California is its Regional Networks of Foundation and Partnership Schools which emphasizes improvements in middle grade education. The Regional Networks Project is also detailed below.

Curriculum Frameworks
The state of California funds the development of "curriculum frameworks" which are used as the basis for the drafting of new curriculum. One such framework holds the promise of dramatic changes in the nature and content of social studies curriculum. Prepared by Diane Ravitch, professor of the history of education at Columbia University, the social studies curriculum framework presents a very different base from which to create a curriculum in this subject.

This innovative work, "History-Social Science Framework for California Public Schools Kindergarten Through Grade Twelve," has been distributed to educators at every level throughout California and to others around the nation. Its strongest features are its integration of history, geography, the humanities and social sciences; its

infusion throughout school levels; its emphasis on ethical and democratic practices; its recognition of the pluralist nature of American society; and its emphasis on the importance of critical thinking and higher order skills.

The substance of the framework is built on three strands: the goal of knowledge and cultural understanding (including historical, ethical, cultural, geographic, economic, and socio-political literacies), the goal of democratic understanding and civic values (which involves national identity, constitutional heritage, and civic values, rights and responsibilities); and the goal of skills attainment and social participation (emphasizing participation skills, critical thinking skills, and basic study skills).

While not yet implemented, the framework is an example of how a carefully constructed curriculum can be a forceful part of school restructuring efforts. Thoughtful implementation of a well-crafted, challenging curriculum, with adequate political support of all involved could go far in aiding school restructuring. It is certainly a necessary component in the process.

Regional Networks of Foundation and Partnership Schools
In another initiative California is attempting substantial improvement of its middle schools. Launched in 1987 and scheduled to continue through 1991, the California middle grade reform project involves 115 schools, 90,000 students and more than 3,000 teachers, counselors, and administrators. The Regional Networks of Foundation and Partnership Schools focuses on necessary changes in middle grade education in that state. Based on the report of the California Middle Grade Task Force, "Caught in the Middle: Educational Reform for Young Adolescents in California Public Schools," the reform of middle schools—while varying from school to school—shares several fundamental commitments, according to Network literature. The reforms across the state will concentrate on these critical areas in order to:

- Significantly improve the required professional preparation of all personnel who work with young adolescents in middle grade schools;

- Dramatically increase the numbers of low income and underrepresented minority students in grades six, seven, and eight who gain access to the highest and most valued curriculum taught in the middle grades in order that these students will be academically ready for a high school curriculum which prepares them for admission to and success in institutions of higher education;

- Significantly increase the percentage of the total student population in grades six, seven, and eight which gains access to the highest and most valued curriculum taught in the middle grades; and

- Significantly change the organizational and structural framework of middle grade schools in order to encourage, facilitate, and enhance the implementation of critical reforms associated with early adolescent education.

The California model of accelerating major reforms in middle grade education involves the creation of ten strategically located Regional Networks each comprised of approximately ten "Partnership Schools." Partnership Schools must express a strong commitment to reach (as opposed to have already achieved) a predefined level of professional excellence and willingness to serve as a catalyst for statewide reform. Each partnership school is committed to:

- Plan and implement new, innovative strategies, programs, practices, and policies which have the potential to facilitate middle grade education reform;

- Engage in research-oriented activities related to instructional issues and to systematically evaluate and report findings through varied forums;

- Make a multiple year commitment in order to allow the critical steps of planning, implementation, and evaluation (both formative and summative) to occur in relation to new programs and practices;

- Create linkages among people, institutions, and organizations that allow a continuous exchange of formal and informal ideas and concepts; to share resources; and to seek to change and improve middle grade education in substantive ways; and

- Serve as a catalyst for middle grade education renewal and reform; to use the networking capabilities of the partnership to disseminate widely findings and recommendations to all levels of public education.

The strategy of Partnership Schools emphasizes sharing among schools, the development of mutual support systems, and the wise and efficient allocation of fiscal and other resources.

A second component of the California model involves the designation of 10 "Foundation Schools," competitively selected, whose primary mission is to assist the Regional Networks in achieving middle school reform. Each Network has its own Foundation School. Foundation Schools must demonstrate strong leadership in all areas of reform associated with early adolescent education. Evidence of such leadership must be expressed through:

- Modeled excellence in specific areas of middle grade education reform identified in the findings and recommendations of the California Middle Grade Task Force;

- Logistical support which facilitates collegial and collaborative efforts among professionals and support personnel as they explore, create, plan, implement, and evaluate new middle grade education programs and practices;

- Creation of linkages with institutions of higher education, health support services, and social service agencies which influence the lives of young adolescents; and

- Professional vision which enables exploration, innovation and a "cutting edge" approach to the goals associated with state-of-the-art middle grade education.

3. Illinois: Accelerated Schools

Illinois has established a Network of Accelerated Schools modelled on the program of Henry Levin of Stanford University. The accelerated nature of Levin's schools focuses on overcoming learning barriers among children who lack the home and community resources assumed by conventional schooling. Acceleration emphasizes rapid, challenging, and exciting learning for disadvantaged students traditionally identified as

at risk of academic failure and who usually face "remediation" in the form of slow, joyless drill and repetition often in a "pull-out" setting. Accelerated learning in the elementary grades is aimed at reducing the gap in achievement between advantaged and disadvantaged students.

The Illinois Network of Accelerated Schools is comprised of twenty-five elementary schools which were selected for participation in a pilot program based on their high concentrations of at-risk students. Located in districts diverse in size and setting the network includes schools from urban, suburban, and rural districts, ranging in size from 190 to 1,020 students. The network schools serve 10,813 elementary school students. The at-risk students in these schools share some common characteristics:

Low Income—Each of the twenty-five network schools serves a greater percentage of students from low income families than the state average. In five schools, more than 90 percent of the families are below poverty level.

Mobi ·. — Each network school reported a mobility percentage higher than the state average. Thirteen of the schools had a turnover of more than one-third of their students during the past school year.

Reading Scores—Seventeen schools reported third grade scores below the state average; sixth grade scores in twenty-two schools fell below the state average.

Ethnic/Minority Student—Ten schools report ethnic minority enrollments greater than two-thirds of their total enrollment.

Limited English Proficiency—Eleven network schools enroll limited-English-proficient students, with four schools serving populations higher than the state average.

Retention—In the network schools, the retention rate is as high as 10.7 percent, as compared to the state average of 3.3 percent.

Attendance—Twelve of the network schools have attendance rate below the state average of 94.5 percent for elementary schools.

The purpose of the Illinois network is to develop and establish programs which enable at-risk elementary school students to perform at grade level by the completion of the sixth grade. The Network creates a partnership between the state Board of Education, twenty-five elementary schools, and eighteen Educational Service Centers (intermediate service units funded by the state). A vote of at least a three-fourths majority of certified and non-certified staff in each school is necessary for participation in the Network. Schools also elect a core team to represent them.

The State Board (department) of Education has pledged training, and resources for coordination. The Educational Service Centers provide support with a variety of technical assistance. The State provided training to school teams in the principles of Accelerated Schools by a team from Stanford headed by Levin and joined by Robert Slavin of Johns Hopkins who developed the educational program called Cooperative Learning.

The Network reports that over the next two years it intends to address the following three goals:

1. To cultivate in students, teachers, administrators and parents the philosophy that a child's success is the responsibility of all these groups and that each group has a specific role to play in the education of the child.

2. To build a system whereby each student's needs are identified and addressed through individual analysis of his/her skills, knowledge, and abilities to perform at an optimum level.

3. To promote the application of language-based strategies across school curriculum, particularly those that enable students to be active subjects in their own learning.

4. New Jersey: Project PRISM

New Jersey has developed a proposal to create a consortium for improving mathematics curriculum, instruction, and assessment called Project PRISM—Partnership for Radical Improvement of School Mathematics. Citing consistently poor performance by U.S. students on international comparisons of mathematics achievement, New Jersey has identified three causes for unacceptable

levels of mathematics knowledge and skills: inadequate and wasted mathematics instructional time, inadequate mathematics curriculum, and inadequate teacher training.

In its literature on Project PRISM, New Jersey quotes the 1989 report by the National Research Council, *Everybody Counts*, "As technology has 'mathematicized' the work place and as mathematics has permeated society, a complacent America has tolerated underachievement as the norm for mathematics education. We have inherited a mathematics curriculum conforming to the past, blind to the future, and bound by a tradition of minimum expectations."

In response to these problems the New Jersey State Department of Education has designed PRISM to address directly the three causes noted above. The mathematics curriculum will be redesigned to emphasize thinking and understanding, not simple computation alone. The new curriculum will be based on several principles including:

* The curriculum will be developmentally-appropriate;

* Students will work from concrete to abstract—students will be actively involved in using physical objects to construct mathematical ideas before symbolic/abstract computation;

* Rote memorization will be replaced by instructional approaches which emphasize the understanding of mathematical concepts and how they are applied; and

* Mathematics will be linked with other subjects and disciplines.

Substantial in-service training for teachers and administrators will be an important part of the project. Training will emphasize both upgraded understanding of mathematics by educators and strategies to implement effectively the new curriculum. This effort will also include the development of new and more appropriate assessment materials.

Recognizing the need to concentrate significant state and district resources in order to improve mathematics education substantially, New Jersey is establishing a consortium of twenty to thirty districts committed to working with the state for five years to achieve dramatic improvement in curriculum and instruction in elementary school mathematics (K-8).

5. New York: Regents Plan

In July 1989 the New York Regents approved a Policy Paper on Educating Children and Youth Placed At-Risk. The paper includes four policy statements and identifies actions to be accomplished during the next five years:

* Existing resources will be better coordinated and used for youth placed at-risk.

* At least fifty percent of any new state resources for elementary and secondary education will be targeted towards enabling schools to meet the needs of youth placed at-risk.

* Educational programs, services and staff must respect and reflect the cultural, racial, social, economic and language background of the students served.

* Schools, school districts, students and the State Education Department will be held accountable at the level of their responsibility for the achievement of youth placed at-risk.

Under the first policy issue, New York is developing a Challenge for Excellence Program to be implemented for each level of education. The program for the middle grades, is one example of the state's effort. The primary intent of the Challenge Program for those grades is to identify, develop, and document alternative, innovative middle-level education experiences. Participating schools' approaches to the education of middle school students and their implementation of the Regents Policy Statement will serve as models for other schools interested in improving education at that level. Schools in the program must demonstrate innovation and success in several areas including: the transition from childhood to adolescence; philosophy and mission; the educational program; school organization and structure; classroom instruction; student support; and professional training and staff development.

The Regents Challenge Program does not provide grants to participating schools. The Program creates a network of schools with outstanding educational approaches, allows the schools latitude in deciding how to provide instruction

most appropriately, and assists in the development of an accountability system for the schools based on a broad range of academic and social outcomes. The Regents plan notes that the accountability system should assess the school's ability to attain excellence that includes learning objectives which reflect:

- academic information, knowledge, and understanding;

- academic skills to locate, use, analyze, and apply information, knowledge, and understanding;

- individual development and self definition; and

- personal/social attitudes and behaviors.

6. Kentucky: Council on School Performance Standards

Under an executive order by Kentucky Governor Wilkinson, the Council on School Performance Standards (1989) surveyed citizens of the state and conducted meetings with community leaders, employers of graduates, parents, school administrators, teachers, and students to assist the Council in developing a plan for the future of education in Kentucky. The Council's report, "Preparing Kentucky Youth for the Next Century: What Students Should Know and Be Able to Do and How Learning Should Be Assessed," provides a detailed and comprehensive plan of recommended change for education in Kentucky.

At the center of the plan are four recommendations saying that the state of Kentucky should:

- **Adopt a new Common Core of Learning for elementary, middle, high and vocational schools with an emphasis on the application of basic skills/knowledge and on student performance.**

The Common Core of Learning should have six goals considered standards for an educated citizen—not minimum competencies—and should:

a. Develop student's ability to use basic communication and math skills for purposes and situations similar to what he/she will encounter in life.

b. Develop student's ability to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, and practical living studies to situations and problems similar to what he/she will encounter in life.

c. Develop student's ability to become a self-sufficient individual.

d. Develop student's ability to become a responsible member of a family, work group, or community.

e. Develop student's ability to think and solve problems both in school situations and in a variety of situations similar to what he/she will encounter in life.

f. Develop student's ability to connect and integrate experiences and new knowledge from all subject matter fields with what he/she already has learned (life-long learning skills).

- **Launch a major effort to assess student performance beyond what can be measured by paper and pencil tests.**

Under this recommendation the Kentucky Council plan indicates that the state should take two related actions. First, Kentucky should establish a statewide School Assessment Plan, operated by an independent agency, to ensure local school accountability for student achievement of the six goals of the Common Core of Leaning. Second, the state should establish a statewide support system to help local schools strengthen their ongoing student assessment programs and support the use of student performance assessment measures in designing instructional programs. The final two recommendations included in the Kentucky plan are:

- **Encourage and support innovative efforts by local schools to adopt new professional roles, organizational structures, and institutional strategies that promote student achievement within the six goals noted above for the Common Core of Learning.**

- **Initiate two intensive and long-range development efforts that support the new Common Core of Learning. The first of the two would establish a program to identify and/or develop assessment instruments that measure student performance related to the**

six goals. The second program would be established to provide incentives and assistance for curriculum reform in local schools related to the six goals.

The Kentucky Council's report also discusses new roles for school staff, new organizational structures and instructional processes, and new professional training necessary for the successful implementation of this performance-driven curriculum. Despite the many attractive features of this plan, its adoption is uncertain because the entire education system of that state is in the process of complete reorganization as a result of a recent sweeping decision by the Kentucky Supreme Court.

C. NEW PROFESSIONAL ROLES FOR EDUCATORS

As schools attempt to adapt to shifting workplace requirements and subsequent changing needs of students, educators in those schools must take on new roles. A significant percentage of students entering today's—and in increasing numbers tomorrow's—classrooms, walk through the school door with a history of poor prenatal and infant health care, absence of critical immunizations, poor nutrition and potentially damaging health behaviors, single parent families headed by a young mother with little education, experience in neighborhoods physically neglected by local government and private development with few good paying jobs available or accessible, a childhood of economic struggle, exposure to potentially devastating street dangers of drugs and violence, and values shaped in growing degrees by commercial media whose intoxicating marketing stresses social values of immediate, expensive, and selfish consumption.

Teachers and administrators must work in significantly different fashions if they are to meet the educational needs of students with such difficulties—or of more advantaged students whose schooling is also inappropriate for the world they will face. Phillip Schlechty defines school restructuring as the creation of new "rules, roles, and responsibilities." Educators at all levels—state, district, and school

building—must assume new roles and responsibilities and help create new rules regarding schooling if students facing such difficult problems are to succeed in school.

The role of the principal must change from one of a traditional administrator to one of a leader with advanced skills for teacher involvement, shared decision-making, the management of human resources, facilitation of professional growth, and evaluation of instructional teams. Teachers can no longer act as sources of primary information and explainers of textbooks but rather, as organizers, leaders, and facilitators of learning experiences and resources. In the past the definition of a good teacher frequently included mastery of class-room management that resulted in the motivation and inspiration of all students in an isolated classroom. Teachers' roles and responsibilities must expand to include a much more varied collection of activity. C e report on school restructuring describes new requirements for teachers:

- Teachers need to be able to manage a number of learning groups of different sizes, all operating at the same time.

- Teachers need to manage flexible time schedules, a wide variety of learning resources, and the effective use of space.

- Teachers need to master assessment of what students have learned and make judgements about a student's most profitable next learning experience.

- Teachers need to evaluate and record student progress in basic and higher order/problem-solving skills, personal and social attributes, and the ability to learn new things on their own.

- Teachers need to be able to identify and use community resources from service agencies, government, business and industry as additional learning sources.

- Teachers need to possess the skills to use computers and other technology appropriately as tools for learning and sources of information.

- Teachers of middle school, high school, and vocational school need to serve on interdisciplinary teaching teams to plan, implement, and evaluate instruction as a group—no longer with only one or two academic or technical fields of study in a single classroom (Council on School Performance Standards, 1989).

Teachers also will need to master two additional areas. They must work more effectively and creatively with school-based and agency-based social service and health workers to help ensure that all students receive the necessary supports to succeed in school. In a related area, teachers must receive training that prepares them to work effectively and appropriately with students' first teachers—their parents and family. Few teacher training centers currently provide such important lessons and few schools successfully involve parents in substantial ways with their children's learning. Few schools provide teachers with adequate time during the school day and academic year for additional training or for effective outreach to families.

The Carnegie Forum on Education and the Economy, through its Task Force on Teaching as a Profession (described in greater detail in a later section of this report) calls for dramatic changes in the nation's teaching force. The American Federation of Teachers and the National Education Association also call for greater professionalization of the teaching force. This current move toward greater teacher professionalization is in part a recognition that conditions can be created—respected and sound standards, greater autonomy, increased pay, clear and fair accountability—which will radically improve the quality of teaching, and hence the quality of learning.

The assumption behind efforts to professionalize teaching as a strategy to restructure schooling and improve learning is that, as professionals, teachers will structure the learning and administrative environment in a way that is centered on the collective and individual needs of students rather than focusing on procedures, regulations, and tradition. They will also seek out and use appropriate professional practice (with its base in commonly recognized and research-supported professional knowledge). The conditions which are necessary to foster and support professional practice require review of three features of school structure:

- The extent to which the organization of instruction fosters responsibility for individual students;

- The extent to which the school structure fosters the use of professional knowledge beyond that represented in the experiences of individual teachers; and

- The extent to which the school structure supports continual self-evaluation and review of practice (Darling-Hammond, 1988).

The extent to which school structure can change to accommodate and support the above three basic conditions, is the extent to which the school can expect to be reasonably successful into the next century. These three minimal conditions are frequently absent in schools with large concentrations of at-risk students.

STATE EFFORTS TO SUPPORT NEW PROFESSIONAL ROLES FOR EDUCATORS

1. Teachers

Two efforts designed to drive improvements in the work of teachers have potential outcomes related to school restructuring. The first uses financial incentives to change what teachers do—paying teachers who do a better job and take on extra duties, and trying to ensure that exemplary teachers are more involved in decisions about teaching and learning. While reviews are mixed about success, career ladders and incentive programs have been put in place in many states.

The second attempt to improve teacher practice focuses on the knowledge and skill of teaching. Professional development academies aim to enhance individual teachers' understanding about and level of practice with teaching.

a. Career Ladders
The literature about career ladders reflects a heated debate concerning their viability and appropriateness. Five years ago the first incentive pay plans for teachers were being implemented; in 1989 states are in various stages of implementing a range of career ladder and incentive programs for teachers.

State legislatures that have financed pilot programs must now consider long-term support. The Southern Regional Education Board's Career Ladder Clearinghouse reports that in most states which have put substantial funding into incentive programs, such funding has increased or held steady in 1988 and 1989. It also notes that if states had provided no funding for planning, few new funds were forthcoming during the same time period. Twenty-five states have career ladder or incentive programs with state funding or assistance and nine states are developing programs.

The Career Ladder Clearinghouse produced a national report in December, 1988 (with an update in April, 1989) "Is 'Paying for Performance' Changing Schools?" In their report the Clearinghouse studied and responded to several questions:

Funding—Have states increased or decreased funding for incentive programs?

Evaluation—What changes are occurring in the evaluation of teachers as a result of career ladder and incentive programs?

Use of Student Outcomes—Is student achievement being used in evaluating teachers or administrators for career ladder or other incentive programs?

Commitment to Change—Will career ladder and incentive programs get a fair test?

Outcomes and Evaluation o io-grams—What has changed in ::ools because of these incentive progra, is?

The last category is of particular relevance to the issue of school restructuring for improved learning. In the section of its report dealing with outcomes and evaluation of programs the Clearinghouse cites Arizona, North Carolina, South Carolina, and Utah as states with recent evaluations of their incentive programs.

The **Arizona** Career Ladder Project reports that the most positive results of its project are the increased awareness of and emphasis on examining student achievement. The report noted that districts are increasing the training of teachers in student assessment and evaluation.

With one of the best known career ladder efforts, **North Carolina's** Department of Public Instruction studied the effects on student achievement of its Career Development Pilot Program. The study compared student achievement from 1985-1988 in the sixteen pilot districts with similar data in non-participating districts. Results showed a rise in achievement in grades three, six, and eight in the career development districts. Non-participating districts saw achievement rise in grade three but decline in grade six for the same period. The evaluation report acknowledges the difficulty of attributing achievement differences to the career development plan but suggests that some positive relationship exists.

In addition to the findings noted above for the entire three-tiered career program, the North Carolina program warrants scrutiny for the special program built around its third level. North Carolina constructed the Lead Teacher/Restructured School Pilot Project joining the highest rung of its career ladder with the lead teacher concept described by the Carnegie Task Force on Teaching. According to North Carolina, early analysis of the accountability information collected by participating Lead Teacher/Restructured School sites show that:

• Instructional-related efforts have dominated program activities;

• For the most part, teacher morale has improved;

• Increased student attendance and decreased tardiness are reported;

• Standardized test scores have improved;

• The numbers of volunteers and parent participation levels in school activities have improved, and

• All sites are planning instructional and organizational change for the coming year.

The Utah career ladder program, now in its fifth year, has four major parts: extended contract year, job enlargement, performance bonus, and career ladder levels. The state contracted with the Far West Laboratory for an evaluation of the career ladder system's overall impact on schools in Utah. The study reports that

the four pieces of the career ladder system "...create a powerful mechanism for school improvement. The system is changing individual teacher behavior [performance bonus and extended contract year] and the ways schools are organized [career ladder and job enlargement] to define goals, delegate authority, and complete tasks." The last two components—career ladder and job enlargement—of the Utah program have permitted schools to provide innovations which were not occurring previously. Short-term job enlargement activities, for example, included monitoring programs, curriculum development activities, homework hotlines, and after-school enrichment programs. Currently six districts in the state have received state block grants allowing each district to use the funding (including funds for the career ladder) with waivers of related state regulations. Utah is planning an evaluation of the effects of this program.

The **South Carolina** Teacher Incentive Program underwent a third party evaluation in 1988 which produced several recommendations. Evaluators called for more equitable funding for the entive program operations. (Each district currently receives twenty percent of the total district allotment for administrative purposes—in small districts this figure may be inadequate; in large districts it may be too much). Other findings from the report point out that districts need more technical assistance; the documenting of student achievement remains a problem; and districts need to provide teachers with information about expected student achievement levels. As a result of the evaluation the career ladder model has subsequently been phased out.

The widely known School Incentive Reward Program is another incentive program and gives monetary rewards to schools meeting criteria including student achievement gain and teacher attendance. Funds may be used for instructional purposes, materials, or equipment. South Carolina reports increased student achievement as a result of its education reform package of which the School Incentive Reward Program is a part.

In addition to the four states cited as states whose career programs have affected changes in schools, several others deserve mention for their efforts

to construct teacher incentive structures which will, hopefully, lead to improved student learning. In some states that connection is clearly drawn, in others it is less so. Questions remain about whether such incentives do have direct impact on improved learning, particularly for students at risk. Many of the programs cited here do not have strong evaluation data that show clearly related outcomes of improved student achievement and learning.

California's Mentor Teacher Program, begun in 1983, was designed to encourage the retention of exemplary teachers and upgrade new and other experienced teachers through work as specially-chosen mentor teachers. The legislation allowed wide latitude in design, implementation, and evaluation of district programs. Individual district and county offices may participate on a voluntary basis. While state law authorized districts to designate up to five percent of certified teachers as mentors, only in the current academic year has the program received full funding—$63.5 million for 10,563 mentor teachers. Each mentor teacher receives a $4,000 stipend and the district is given an additional $2,000 per mentor to support training, release time, and other related costs.

The Horace Mann Teacher program in **Massachusetts** provides for expanded duties for teachers including responsibilities for training teachers, developing curriculum, giving special help to potential dropouts and serving as in-service instructors. Each school may apply for a grant under the program. The maximum compensation for each Horace Mann teacher is $2,500; the district also receives $120 per teacher.

Also in **Massachusetts**, teachers may apply for a Lucretia Crocker fellowship which supports the development, replication, and dissemination of exemplary educational programs which have resulted in improving student academic and creative achievement and in developing improved school climate. Currently sixteen fellowships are funded statewide. Reduced state funds for education have slowed expansion of these programs.

New York has developed several teacher incentive programs including the Mentor Teacher-Internship Program, the Teacher Opportunity Corps, and the Empire State Challenger Scholarship and Fellowship programs. The Mentor Teacher-Internship Program gives

monies to districts which then underwrite first-year teachers with support, guidance, and leadership from more experienced teachers. The Teacher Opportunity Corps attracts teachers to work with at-risk students and provides funding for enriched teacher education regarding the special needs of at-risk students. The third program, the Empire State Challenger Scholarship and Fellowship, directs funds to students preparing to teach in shortage areas.

Oregon has appropriated $2.4 million for pilot projects developed by local communities in seventy schools. Funds are awarded at the level of $1000 per teacher at each pilot site. These projects are designed to provide for professional development and school restructuring, and are to address four areas:

* The development of educational goals for individual schools and districts;

* The assessment of educational progress of school programs and students;

o The professional growth and career opportunities for Oregon teachers; and

* The restructuring of the school workplace to provide teachers with professional responsibilities and authority.

Another nationally-known incentive effort is the **Tennessee** Career Ladder Program which uses a three-rung ladder for teachers and other school professionals whose performance is evaluated based on dialogues with teachers and questionnaires completed by the teachers' students and principal. Educators may voluntarily seek the three career levels based on their performance. Career level 1 status is determined by local district evaluation while the other two levels require a state evaluation.

In 1988 **Maine** enacted a new teacher certification law. According to the Maine Department of Education, the new legislation has had three effects. It has:

* Upgraded and strengthened the requirements for a teaching credential. The law requires a strong liberal arts and science background with a major field of study in the subject area to be taught or graduation from an approved four year teacher preparation program with a major in the subject to be taught;

* Created a decentralized program coordinated by the school administrative unit through the establishment of state approved support systems. The support systems, comprised of a majority of teachers, are responsible for the certification renewal process at the local level;

* Created a three-tiered certification program allowing candidates to qualify for provisional, professional, or master level certificates. The three levels of credentials created the opportunity for school districts to establish career ladders for teachers.

Georgia has completed the pilot first year (1988-89) of its Career Ladder Program. Voluntary participation by Georgia teachers requires that they develop a three-year professional development plan. One of the program's unique features involves the funds available to school districts for career ladder supplements. The amount of funds is based to a large degree on the productivity of the school system, measured by the Georgia Statewide Testing Program (after adjustment for socio-economic factors known to affect student test performance). Georgia also has piloted teacher mentor efforts, especially in critical areas of mathematics, science, and foreign language. Plans exist for the expansion of this program to a statewide teacher support program in 1990.

b. Professional Development
Virtually all states and districts make available professional development activities—in-service training—of some sort to teachers. The training activities are usually provided by university faculty in graduate courses, by consultants to the district or school, or by state and district personnel in workshops to school staff.

Whatever the site or provider, the critical variable is quality. What kind and quality of training is available to teachers? Are in-service workshops seen by teachers as merely places to pass time and collect hours for the purpose of salary increases? Is this attitude encouraged by the structure and content of the workshops—do they dwell on specifics of district-ordained procedures? Or do they offer a time for thoughtful and creative interaction between professionals in the field of teaching—interaction that leads to changes of procedure and practice to improve the learning of students?

While these questions need to be asked in individual states, it is very difficult to answer them across the states, given the variety of in-service training structures and programs and because these programs often differ by school district. However, it can be noted that very few states have created academies or institutes for the professional development of teachers (unlike a growing number of such centers for principals). New Jersey is one state of very few that has a statewide center for teacher in-service professional improvement. New York, on the other hand, has created a statewide system of State Teacher Centers.

The Academy for the Advancement of Teaching and Management in Edison, **New Jersey**, began its program of strengthening the in-service professional development of teachers and school administrators in 1984. The Academy attempts to serve two elements basic to any profession—a common particular body of knowledge and professional training and evaluation of new members—by both striving to increase teachers' knowledge about methods of teaching and to develop in-service programs where teachers instruct their peers. The center of the Academy's programs is a course called Instructional Theory into Practice (ITIP), a behavioral model of teaching.

In an evaluation of the Academy by the Council of Basic Education (CBE) (1988), "New Teachers, Better Teachers," the Academy receives very high marks overall for its efforts. CBE does, however, raise three criticisms. First, it points out that the Academy should be better tied to other teacher training efforts (particularly preservice training). Second, CBE notes that the Academy has no mandate to address the particular problems of urban schools. The report fails to mention, however, that eighty percent of the New Jersey urban districts have participated in the Academy. CBE recommends that such urban initiatives become part of the explicit mission of the Academy. Third, the report criticizes the ITIP approach as too narrow in its focus on a behavioral model of teaching and recommends that the Academy also include other models and ends of teaching, and develop programs which

focus on them. In arguing for its last recommendation, CBE cites Lee Shulman of Stanford who offered his insights regarding instructional practices.

> We argue that teaching typically occurs with reference to specific bodies of content or specific skills and that modes of teaching are distinctly different for different subject areas. The particular kinds of learners and the character of the setting also influence the kind of instruction that takes place. Finally, we believe that teaching involves reasoning as well as acting; it is an intellectual and imaginative process, not merely a behavioral one.

Since 1987, the Academy has added other teaching models to its repertoire to broaden its pedagogical approaches. Currently, the Academy offers, in addition to a behavioral model of teaching, Learning Styles/Teaching Approaches, Learning to Think, Cooperative Learning, and Beyond Discipline (a model of classroom management that encourages student self-direction.)

While these three criticisms are relevant to the work of the Academy, they are noted here because they represent issues far beyond New Jersey's experience which must be addressed by all programs which provide in-service professional development. If in-service training programs are to be effective in fostering school restructuring for improved student learning, then they must also become active in larger networks of teacher preparation, address the needs of urban students, particularly those at risk, and help teachers improve and expand their repertoire of teaching methods and models so that they are better able to support effectively and appropriately the learning of all students.

New York does not have a single teachers' academy but has developed a system of centers—the New York State Teacher Centers. Begun in the late 1970's, teacher centers in the United States were influenced by the success of centers in Great Britain and their growth was fertilized by plentiful federal dollars. When those monies were eliminated in 1982, many teacher centers continued to function with assistance of local education agencies, teacher unions, foundations, and colleges of education. In 1984 New York State passed legislation establishing a statewide system, actually

exceeding the earlier federal support. New York State now operates ninety-one Centers with a budget appropriation of $16 million (a sum exceeding the original federal appropriation for the entire country).

The teacher centers are designed to provide several kinds of support for teachers and are to be operated by teachers themselves. The purposes of the state system are to:

- Introduce the use of multiple instructional approaches;

- Establish demonstration sites for research, computer, and other technologies related to education;

- Provide locations that would facilitate the sharing of ideas, resources, and methods of instruction; and

- Assist teachers who move to new or different disciplines.

The teacher centers are managed and run by local policy boards composed of teachers (a majority), administrators, parents, and members of the community. Because they operate locally and because teachers are active on the policy boards, local teacher "ownership" is a key feature of the centers. According to the Director of the New York City Teacher Centers Consortium, there is a model emerging among the state's centers based on professional collaboration. This model is supported by the state's implicit acceptance that professional development performed by teachers will be more effective because of its greater likelihood of relevance and peer acceptance (Cooper, 1988). Cooper points out that the New York City teacher centers have had a significant impact on many of the participating teachers, especially where Teacher Specialists have assisted classroom teachers improve their learning practice with students at risk.

The **Minnesota** Board of Teaching awarded two-year planning grants in 1987 to the:

- Metropolitan Teacher Center (Serving 16 school districts and 5076 teachers)

- Northeast Minnesota Head of the Lake Teacher Resource Center (Serving 11 school districts and 1689 teachers)

- Northern Coalition Teacher Center (Serving 14 school districts and 920 teachers)

The 1989 Minnesota Legislature authorized the Minnesota Board of Teaching to award grants both for planning teacher centers, and for awarding funds to 1987 recipients of teacher center planning grants funds to begin to implement teacher center activities.

The **Department of Defense Dependents Schools** (DoDDS) is initiating a three-year staff development program emphasizing instructional evaluation for school improvement. During the three years 9,400 teachers will participate in an Understanding Teaching course in order to upgrade educational practice. DoDDS will also implement its Skillful Teacher program which is designed to train principals to become better, more knowledgeable evaluators of teachers. The program will also provide teachers with a broader repertoire of teaching skills.

Idaho's new state-funded mentor program serves both first-year teachers and first-year administrators, using the state's postsecondary education institutions to provide workshops and individualized training as needed. Under the program, experienced teachers and administrators are assigned as mentors to beginning personnel and receive additional salary for observing, coaching, and supporting new staff members. Funds are also available for school districts to contract with teacher and administrator preparation programs at the state's colleges and universities for any additional skills development needed by beginning teachers and administrators.

West Virginia plans to initiate a program of assistance to new, first-year teachers during the 1990 fiscal year.

2. Principals

One of the oft-repeated phrases of the effective schools literature has to do with the importance of the principal as the school's instructional leader. Much has been written in the mid-1980's about the critical role of the principal in directing the energies within the school toward improved student learning. Principals became the focus of attention in the 1980's because of a research-based

rebirth of optimism regarding school effects on students' achievement and the principal's effects on school climate and "educational productivity." Robert Wimpelberg of the University of New Orleans in his 1987 paper "The Inservice Development of Principals" writes about this and several other phemonena which characterize and attempt to explain the growth of inservice training for principals (Wimpelberg, 1987).

Perhaps because of this emphasis on the principal-centric nature of good schooling, in the past decade there has been a tremendous growth of principal centers, institutes, and academies. Whatever their names, these inservice, professional development centers for principals have appeared across the land. Sometimes supported by state agencies—although most often supported by professional organizations, educational development laboratories, and universities—these centers have provided training for principals which vary widely in theme, content, and quality. Roland Barth at the Harvard Principals' Center helped form the National Principals' Center Network, a loose consortium of inservice organizations which sponsors an annual conference and compiles a national directory.

The curriculum of the centers vary considerably and their emphases may fall under the headings of: managerial competencies, correlates of effective schooling, or characteristics of effective principals/.eachers. At this point, according to Wimpelberg, the nomenclature may broaden to areas of: decision-making, human relations, communication, curriculum, instructional leadership, or clinical supervision.

The underlying assumption which led to the expansion of principal centers must come under new scrutiny given the emphasis placed on shared decisionmaking in many school restructuring projects. While the importance of a strong principal who provides a vision of improved learning and high achievement for all students is still vital—and validated in both practice and research—the training available to principals requires re-examination. School restructuring necessitates, by definition, fundamental reassessment of the role of every actor in the schooling process, including the principal. The principal is now growing into the role of mediator, negotiator, facilitator and coordinator of

shared decisionmaking instead of primarily a manager—a new and very different quality of leadership, one which principals' centers are beginning to face.

The National Directory of Principals' Centers lists seventy-one participating principals' centers in twenty-seven states and the District of Columbia. Five random state examples below indicate the range of number and kind of centers in the states.

CALIFORNIA

California School Leadership Academy, Hayward

California School Leadership Academy, Sacramento

California School Leadership Academy, Santa Rosa

Administrator Training Center, San Diego

Far West Laboratory, San Francisco

Global Educators, San Leandro

GEORGIA

Georgia Education Leadership Academy, Atlanta*

Principals' Center at Georgia State, Atlanta*

Southern Regional Education Board, Atlanta

Educational Leadership Center, Valdosta

Provide opportunities to study school-based management

INDIANA

Indiana Principal Leadership Academy, Indianapolis

Indiana Principals' Center and Network, Muncie/Terre Haute

NEW MEXICO

The New Mexico Principals' Center, Albuquerque

WISCONSIN

Academy for Equity in Educational Administration, Green Bay

Principals' Professional Development Academy, Green Bay

In addition to the states noted above, other states with principals' centers (and the number in each state with more than one site) include: Alabama, Alaska, Arizona, Colorado(2), Connecticut(2), Delaware, District of Columbia, Florida, Illinois(5), Iowa(3), Louisiana, Maine(2), Maryland(3), Massachusetts(6), Michigan(2), Minnesota(2), Mississippi, Missouri(3), New Hampshire, New Jersey, New York(12), Washington(2), and Wyoming(2).

3. Superintendents

Despite the emphasis on training (both in-service and pre-service) for school principals, much less has 'been written about the preparation and training regarding district superintendents. Even less has been said about preparing them for school restructuring.

Paul Hill and his colleagues have written about the role of superintendents in school reform in several urban districts (Hill et al., 1989), but there is little published about what sort of training is necessary for superintendents to lead school restructuring. As efforts to restructure schools spread and as more superintendents deal with elements of restructuring, there will be a greater emphasis on the needs of superintendents.

Three examples of states where movement in this direction is occurring are Massachusetts, Illinois and Georgia. Massachusetts recently held a seminar for superintendents to examine school-site improvement and how the role of the superintendent changes when districts move to decentralize authority and decisionmaking. The planners had arranged for seventy-five participants and 180 superintendents—more than half of all superintendents in Massachusetts—responded wi: hing to attend. Unfortunately because of recent budget cutbacks, follow-up programs for the superintendents will not be possible in the immediate future.

Illinois hosted a several-day conference sponsored by the University of Illinois-Champaign's Leadership Center in conjunction with the Illinois Leadership Academy. Currently principals in Illinois undergo an instructional leadership assessment on site using that state's five parameters of leadership. Conference

participants discussed plans to re-norm the principals' assessment for superintendents, taking into account what a model of a successful superintendent should be. The overriding assumption behind the slowly grow:.ig emphasis on superintendents is that school restructuring with decentralized school-by-school decisionmaking is not possible without changes in district policy and is not likely without support and leadership by the superintendent.

During 1988-89, the **Georgia** Education Leadership Academy conducted a series of workshops for fifty-four newly-elected Georgia superintendents. Among the topics covered included emphasis on the superintendent's role in affecting change, participatory leadership skills, public relations as related to innovation and change, and team building activities. The newly-adopted state evaluation instrument for local superintendents includes dimensions on planning, goal preparation, communication with subordinates, and other activities related to the superintendent's role in decision making and leadership.

D. ACCOUNTABILITY THAT SUPPORTS SCHOOL RESTRUCTURING

Growing interest in accountability—the requirement of furnishing a justifying analysis or explanation of conduct—for public and private institutional performance has had profound effects on education. Accountal 'lity in public education traditionally has been based on the assumption that information about financial accounts, student attendance, curricula, and test results would serve as a resource for policymakers, practitioners and the public to demand or effect improvements in schooling. In practice, this assumption has not universally proven correct. Current accountability measures and methods have not resulted in a kind and quality of schooling that prepares all students appropriately for a productive and responsible adulthood.

A report by the U.S. Department of Education on educational accountability lists five mechanisms by which states or districts collect data on specific indicators to gauge the relative success of schooling. These mechanisms include:

- Fiscal Audits

- School Accreditation

- Performance Reporting

- Personnel Evaluation

- Program Evaluation (U.S. Department of Education, 1988).

This report examines two major categories of educational accountability: new assessment methods and direct state intervention. The first involves evaluation of both student and teacher performances. The second has to do with district and school accountability and increasing action by states to ensure that particular performance standards are met.

1. New Methods of Assessment

While all five mechanisms noted above have relevance for school restructuring to improve student learning, performance reporting—by its design, its requirements, and its use—can have particular influence on efforts to change schools in fundamental ways. Typically, in the effort to determine what students know and can do—what they have learned and, hence how well the school has performed—the state or district administers standardized tests. It is charged by some that such testing has had negative effects on curriculum (e.g., narrowing the content to meet the demands of multiple-choice questioning), and student learning (e.g., emphasizing minimal competencies alone rather than including higher order and critical thinking skills). Because such tests attempt to measure a student's prior knowledge along a narrow range of discrete information, critics argue that they fail to measure student performance and do little to improve individual student learning (Wiggins, 1989).

Several states have begun experimenting with new types of assessment measures both in the areas of student performance reporting and of personnel evaluation. In the first area, student performance, educators are attempting to design assessment tools that are not limited only to measuring the specific content students know, but what they can do with what they know—to measure performance, not merely knowledge.

Others are pressing even further, demanding that tests not only measu. prior learning but directly aid in improving learning. Such tests would be deliberately designed to improve teaching and learning with an engaging and standard-setting approach.

According to Grant Wiggins, who has worked with several states in the effort to develop new assessment procedures, "Like the recital, science project, Satur-day athletic contest, or debate, such academic tests would be true intellectual performances. They would do more that elicit short, correct answers or ask students to plug in formulae or verb tenses. Like all performances, these kind of tasks would require knowledge in use, good judgement, a dash of personal style, craftsmanship, and elements of collaboration. They should be authentic intellectual challenges...Our tests are typically inauthentic because they are tests meant for passive, glib spectators, not disciplined, intellectual performers" (Ibid, 1989).

Below are several examples of states' efforts to develop new and more didactic student assessment methods. Also described are attempts by states to improve the assessment of teachers. As schooling is redesigned to focus on improved student learning—and as roles, rules and responsibilities change—what teachers should know and be able to do must change. While several states move to develop new teacher assessment methods many other states appear to be awaiting the implementation of the work of the National Board for Professional Teaching Standards. This program to create board-certification of teachers, similar to the process for physicians, is designed to professionalize the teaching force and exist alongside state licensure and certification requirements. Several states have indicated an interest in redraft.ng their teacher assessment instruments to mirror the standards developed by the National Board (whose work to date is described in Section VI of this report).

a. State Efforts to Improve Student Assessment
Vermont: Quality Assurance Program for Education
Vermont is involved in a unique experi-ment to create a radically different tool to assess the learning of its students. Working from the assumption that particular forms of tests drive the kind

and quality of teaching, Vermont is developing performance criteria of a kind that encourages teaching for critical thinking and higher order learning.

The new assessment system will be of two parts and combine a Vermont-created standardized test and a scoring system of portfolios of students' work in writing and mathematics. This two-pronged assessment will take place in the fourth and eleventh grades. The portfolios will contain one year of a student's work. The student and teacher will decide together what three or four pieces reflect the students' "best work" and then submit this set of math and writing work to a.' assessment center of teachers for scoring.

Vermont Department of Education staff point out that they enjoy several advantages in this experiment in new assessment. Vermont is a small state (94,000 students and 6,400 teachers) and does not presently have a statewide assessment system so staff can more easily monitor its development and do not have to adjust to an existing system. They do, however, face complex and difficult questions:

- How does one score a portfolio? (Should drafts of writing be included and initial steps in mathematics docu-mented in order to show growth and ability to redraft?).

- Will the display of a student's best work encourage best teaching?

- Should portfolio work reflect a broader set of dimensions (e.g., How much of the self is exposed in the writing? How generalizable are the concepts in the essays?)?

- How generalizable are the portfolios to the larger domains in math and writing?

- What will the relationship be between the standardized test and the portfolio?

Vermont is beginning to answer some of these questions and will adopt a pilot version of this process in 1990; imple-ment the program in 1991 and produce a statewide report; and do the same again in 1992.

Other states are moving ahead with changes and experiments in student assessment. Several are worth careful examination: Connecticut's foreign language examination, California's and New York's operational performance science tests, Michigan's and Illinois' reading comprehension tests, and Maryland's, Maine's, Georgia's, and South Carolina's writing tests.

The Missouri Mastery and Achievement Tests—though paper and pencil exami-nations—have been coupled with widespread staff development in mastery and cooperative learning resulting in improvement of student test scores in that state. New Jersey h. moved from what its state educat: .. agency describes as the low expectations of their Minimum Basic Skills program to the more rigorous demands of a new High School Proficiency Test (HSPT). An "early warning" test will be admini-stered in the eighth grade. The proposed eleventh-grade test is expected to include questions requiring students to use skills of problem solving, reasoning, drawing conclusions, and completing multiple-step mathematical problems. The examination may also require written responses to a reading passage rather than correct selection among multiple-choice items. The HSPT will be fully implemented in the 1993-1994 school year and will be a basic skills test which must be passed in order to receive a New Jersey high school diploma.

In California every public school, kindergarten through grade 12, is provided a "School Performance Report" which describes the school's progress on an array of performance measures (e.g., test results, dropout rates, college participation rates, etc.). As a result of a recent statewide ballot proposition, California schools will be required to produce their own "School Accountabil-ity Report Cards." These report cards will include local data, objective and subjective, which is not available at the state level. California also uses its "Program Quality Review" (PQR) as a vehicle to provide schools with program-matic feedback. The California Depart-ment of Education describes the PQR system as a sanction-free review process which is implemented regionally, generally by the staff of neighboring school districts knowledgeable in the area of curriculum and instruction.

Several states (e.g., New Jersey) and districts are currently experimenting with a variety of school "report cards."

b. State Efforts to Improve Teacher Assessment

As part of the effort to professionalize teaching, critics have pointed to current teacher assessment and certification as being inappropriate devices to ensure improved professional practice among teachers (Darling-Hammond, 1988). Instead of fostering incentives for teachers to pursue new professional knowledge, to experiment with novel techniques, to seek out peer review and collaboration, and subsequently, to raise the quality of teaching, current assessment ensures the passing of minimal competencies—usually in the form of accumulation of specific university courses related to education. Several states are working to improve dramatically the assessment, licensure, and certification of teachers.

Connecticut and California: The Interstate Teacher Assessment and Support Consortium

The Interstate Teacher Assessment and Support Consortium was created in 1986 by the chief state school officers of Connecticut and California to provide a vehicle for sharing state work in developing new systems for prospective teacher licensure with the developmental work of the National Teaching Standards Board and its research partner at the Stanford Teacher Assessment Project. While both Connecticut and California have moved ahead individually to further develop and experiment with new approaches to teacher assessment, the Consortium has expanded to include a variety of states and licensing boards, colleges and universities, professional organizations, and testing firms.

The Consortium aims to encourage states to improve teacher assessment and support. Its method in this effort has been to create a program of networking, informational workshops, and collaborative development projects and so introduce states to new assessment concepts, assist those states in applying those concepts to their own situations, and provide a mechanism for collective work on new assessment projects.

Additional issues of interest to the Consortium include procedures to score and interpret results of qualitative teacher assessment methods—interviews, portfolios, simulations, or observation; identification and incorporation of teaching capabilities involved in successfully serving students at risk; and analysis of the relationship between teacher assessment, new teacher support, and school restructuring.

What drives the sharper look at teacher assessment is the desire to improve teacher practice, particularly as teachers become more accountable for improved student learning. As with other components of schooling, the end that should drive new approaches in teacher assessment is improved student learning where all students are reaching maximum competencies, as Asa Hilliard of Georgia State University demands. Students who have traditionally succeeded in school should do better and those who have not been served well by schools should show substantial learning gains and catch up to their peers. Teacher assessment should result in this sort of improvement in learning.

2. Direct State Intervention

One major result of the various "waves" of school reform in the last decade is the increased emphasis by states on educational outcomes, primarily student achievement. Many states now provide incentives for improved achievement, rewarding schools and districts for demonstrable progress. The forms these awards take vary considerably. In a National Governors' Association (1987) publication, *Capitol Ideas*, several kinds of rewards were noted for school or district progress and include: the provision of extra discretionary funds; the awarding of certificates, trophies or other tangible displays of recognition; asking teachers from those successful schools to provide technical assistance to other educators; or publicizing those schools which have shown progress.

This direct state intervention functions as a double-edged sword in several states, however. A growing number of states have passed legislation permitting and have developed procedures outlining direct state intervention in schools and school districts where students are not making acceptable progress or where the district is in severe financial difficulty—so called academic or fiscal "bankruptcy."

Fiscal bankruptcy is one edge of the blade of state intervention and generally involves direct state action in instances when districts are unable to meet debts or obligations with current resources. NGA research indicated several kinds of consequences for districts faced with fiscal bankruptcy. States may take several actions: withholding funds from a district; requiring an improvement plan from a district; removal of district official(s); appointing a non-district official to oversee district actions; withholding accreditation; or requiring district merger.

Ohio districts in financial difficulty are required to borrow from a special state loan fund which permits the state Superintendent of Public Instruction to enforce strict financial monitoring procedures. Oklahoma law permits, in instances of district financial problems, the State Board of Education to annex the troubled district to an adjoining district. In both Pennsylvania and Rhode Island the state may take over districts in financial hardship.

Educational bankruptcy by districts may involve one or more of several deficiencies. The NGA study, mentioned above, quotes research which says that states may take over districts in order to correct shortcomings in, "educational programs, educational outcomes, student performance levels, or school management procedures."

New Jersey's action regarding the Jersey City School district is the best known current effort by a state to improve the schooling of students by direct and broad intervention. In July, 1989 a New Jersey administrative law judge recommended that the local board of education in the Jersey City school district be removed and that a state-operated school district be created.

In New Jersey, as in other states with authority to intervene in districts, elaborate procedures have been established to make district annexation or takeover the very last resort. While states differ in detail, generally what occurs is that poor district academic evaluations trigger a more detailed evaluation by a special team, the state board of education, or other bodies. (**South Carolina** for example, declares a district "seriously impaired" if it fails to meet two-thirds of minimum standards on student test scores and three-fourths of accreditation standards for categories such as teacher attendance or dropout rates.) Improvement plans are then submitted to the state for approval. The district receives a wide array of technical assistance to help it correct the original problem and implement the improvement plan. If all of the steps taken by the state fail to produce the desired outcomes, then the district is declared bankrupt ("district emergency" in South Carolina).

At the point of a bankruptcy declaration states then take one of two actions. The state either moves to have the district annexed to an adjacent district (e.g., **Arkansas**, and **Illinois** which designates the district with "non-recognition" status, essentially dissolving it and making way for annexation) it initiates a direct takeover usually in the form of a state-appointed monitor in place of the district superintendent (e.g., **Georgia, Kentucky, Mississippi, New Jersey, New Mexico**, and **Texas**). Ohio may bring proceedings to revoke the district's charter. South Carolina's Governor may declare the district superintendent's office vacant allowing the State Superintendent to appoint an interim replacement.

V. District Efforts to Restructure Schools

This section of the report examines efforts by school districts to restructure schooling and so improve the education of their students. It is organized in a fashion similar to the preceding discussion about state restructuring initiatives—sections here cover the topics of school governance (decentralization and parental choice), fundamental changes in curriculum and instruction, new roles for educators, and experiments with methods of accountability. The intention here is not to provide an exhaustive list of every district's involvement in each of these areas but, rather, to highlight local district efforts with various elements of school change and offer an example or two for illustrative purposes.

A. DISTRICT-LEVEL SCHOOL GOVERNANCE

1. Decentralized Authority

Among some of the better known current efforts to restructure schools are those occurring at the district level, in particular those attempts to decentralize authority from the district office and place more decisionmaking in the school. School-based decisionmaking has become virtually a banner for many interested in school restructuring with the lamentable result that increased school-based management, organizational flexibility at the school-site, shared decisionmaking among teachers and principal, and the granting of waivers of state or district regulations are occasionally becoming more ends than means. Increasingly, some districts and individual schools emphasize decentralized authority and neglect what should be the primary goal—improved learning for all students. Decentralization should function as a tool to ensure higher and richer student educational achievement.

Nevertheless, there are important experiments underway in several districts where staffs of individual schools struggle with the implementa-

tion of various kinds of site-based management in the effort to improve student learning. Success varies among schools but it is instructive to study the numerous districts where these attempts are taking place.

Miami/Dade County, Florida is perhaps the most often-cited example of decentralization as an approach to school restructuring. Florida's largest and the nation's fourth largest school district, Dade County instituted in 1986 its pilot program of School-Based Management/ Shared Decision Making (SBM/SDM). The goals of the SBM/SDM project include:

- An improved educational program for all students;

- An increased focus of school district resources and increased shared-decisionmaking and accountability at the school level;

- Greater flexibility and responsibility in budget development and management at the school level;

- Increased collegial planning, implementation, and evaluation of the instructional program;

- Greater opportunities for flexible scheduling and staffing;

- Increased teacher involvement in staff development activities; and

- Increased opportunities for community, business, student, and parent participation.

The Miami School Board and the United Teachers of Dade worked jointly to modify district policies and requirements. The union-management partnership is an element present in most current and contemplated programs in Dade County. SBM/SDM—a direct result of such collaboration—is a pilot program where thirty-two schools were selected to pursue restructuring efforts and report, not to the normal administrative structure, but by-pass several levels of administration and report to a central administrator.

Fifty-three schools submitted proposals which were reviewed by a joint labor/ management committee. Dade County reports that innovations outlined in proposals included a change in the hours of the school day, implementation of block scheduling, curriculum innovations, peer evaluation of teachers and principals, and differentiated staffing models, among others. The thirty-two schools chosen to participate in the program requested over 100 waivers from the union contract, school rules and regulations, and state rules and regulations. All requested waivers were granted. During the pilot program, participating schools can continue to request waivers and to change proposals.

For participating schools a computerized budget system—"School Based Budget System"—was developed as a cost neutral system which produced no new funds but provided schools the opportunity to develop their own dollar-based rather than unit-based budgets. Schools are permitted discretionary decision making in 80-90 percent of the budget. This system allows for differentiating staffing and salary enhancements beyond that which is currently permitted in other schools. Teams from the pilot schools were given training about the new budget system.

An evaluation plan was developed which includes a formative evaluation during the three years of actual operation and a summative evaluation at the end of the last year. The SBM/SDM project is a four-year pilot program. In an effort to better prepare staff to work with new school systems, the principal, shop steward, and three elected representatives from each participating school attended training conferences sponsored by the district with the State Department of Education providing funds for consultants. These conferences were designed both to provide outside assistance and to promote the sharing of ideas among school personnel.

Based on the success so far of SBM/ SDM, Dade County has arranged for a second set of pilot schools. The planning year for this expansion is 1988-89 with implementation in 1989-90. Several other initiatives are underway including one related to school restructuring— decentralizing decisionmaking further by extending shared decisionmaking to the entire elementary/secondary school feeder pattern.

District 4 in New York City has received both national and international recognition for its alternative schools initiative, an experiment which for more than a decade and a half has proven to be successful in raising the level of academic achievement of its students. Located in the East Harlem section of Manhattan—the oldest Puerto Rican community in New York and one of the most economically depressed—District 4 includes 22 alternative schools and 10 bilingual centers operating in 20 school buildings. The district offers its students the option of enrolling in an alternative or in a traditional school within the district boundaries. In 1973 the district was ranked 32nd of all districts in the city; by 1988 it had risen to number 18 among 32 districts.

In 1974, under the leadership of Anthony Alvarado, District 4 Superintendent, Debbie Meier and other classroom teachers, adopted a "school within a school system" which created a series of small alternative schools (less than 250 students) with a particular instructional emphasis and educational philosophy. These teacher-initiated alternative schools are characterized by a) a small instructional setting, b) a teaching staff that is creative, committed, and involved in the decisionmaking process of the school, and c) a strong parental involvement component.

The alternative and traditional programs provide parents a wide choice of educational options within the district. At the elementary level, most students attend their neighborhood school, although a substantial number (about one fifth) voluntarily choose an alternative school. At the junior high level all students and parents participate in a formal process of school choice.

Despite its use by school choice advocates as an example of how choice can drive school improvement, the District 4 alternative schools program represents a gradual, incremental approach to the

introduction of parental choice. Elmore (1989) details the changes that occured over 16 years in the district and describes the procedure for parents to choose a school. He notes that the changes "are the result of dogged persistence over 16 years, a much longer period than most school systems are willing to devote to an educational innovation." He also points out that the reason the programs grew slowly was "because district administrators subscribed to the belief that choice was meaningless in the absence of quality."

Community School District 4 emphasizes the creation and sustenance of small, caring learning environments. District literature reports that each school strives to provide a quality education that supports the whole child through experiential, integrated learning that develops critical thinking and problem-solving skills. There is a strong emphasis on community participation and ownership of schools, particularly on the need to have substantial parental and family involvement with the schools. The Central Park East Secondary school is a member of the Coalition of Essential Schools.

In what amounts to the most dramatic effort to decentralize any major urban school district in the nation, **Chicago, Illinois**—the nation's third largest school district—has completely restructured its form of school governance. Where formerly a district superintendent oversaw a powerful central office staff, now each school is governed by an elected neighborhood council. School councils are composed of eleven members including six parents who have children attending that school, two building teachers, two non-parent community members, and the principal who sits as a non-voting member. All council members, except the principal, are elected. Chicago held its first election in mid-October of this year. Nearly thirty-five percent of the 277,000 parents of elementary school students voted.

Chicago's reform plan is the result of a grassroots political movement instead of an effort by educators. It gives the school Council significant authority including complete say over a lump sum budget, the hiring and review of the principal, and responsibility with the principal and staff for a three- year school improvement plan. The principal, while directly accountable to the school council, also has broader authority over teacher hiring and firing.

The Chicago reform legislation has also changed the composition of the School Board and virtually done away with much of the district office. A School Finance Authority is charged with oversight of the plan's implementation.

Numerous other district efforts at decentralization deserve study. Several examples of unique and interesting experiments of school restructuring include:

- San Diego, California
- Hammond, Indiana
- Baton Rouge, Louisiana
- Santa Fe, New Mexico
- Rochester, New York
- Pittsburgh, Pennsylvania

2. Parental Choice at the District Level

At the district level, like at the state level, proponents of school choice argue that the strategy of allowing parents to choose the school their children attend permits a direct governance of schools. They also contend that choice will drive school improvement (and drive poorly performing schools to close).

Actually school choice is not a single and universally-accepted program, but represents instead a variety of systems at the district level. Unlike the earlier discussion of parental choice of schools among and between various numbers of districts, this section examines the variety of intradistrict parental choice programs. This category of parental choice programs within a single district may be divided into five types: controlled choice programs, limited number of magnet schools, all schools as magnet schools, alternative schools, and postsecondary education.

Controlled Choice
Controlled choice programs allow parents to choose among desegregating schools—with no guarantee of assignment—in or outside of their immediate residential neighborhood. These programs attempt to ensure that minority and majority students have equal or proportionate access to all schools (and programs), and that final assignments are made irrespective of the child's residential neighborhood in the district (thus attempting to break the dependency on neighborhood housing patterns).

The extent to which controlled choice programs are effective hinges on effective implementation and interaction of at least the following five elements according to Michael Alves and Charles Willie in their article "Controlled Choice-An Approach to Effective School Desegregation" (Alves, M. and Charles Willie, 1987):

1. Eliminating, to the extent practicable, all individual school attendance boundaries.

2. Adopting and enforcing a definition of desegregation that guarantees minority and majority race students genuine proportional access to all schools and programs of choice.

3. Allowing parents and students to make multiple school selections but with no guarantee that they will obtain their first choice schools or programs (although most will).

4. Operating a truly effective parent information and outreach process.

5. Ensuring complete honesty and integrity in the disposition of all final assignment decisions.

The basic underlying assumption of controlled choice programs, add Alves and Willie, is that "all children have a right to an instructionally effective, desegregated education, but that no child has an implied property right to attend a particular public school."

One school district that has implemented a controlled choice program since 1979 is **Cambridge, Massachusetts** where neighborhood school zones were abolished in 1981 and school choice based on racial and space considerations was instituted. Parents may choose among thirteen elementary schools (K-8) or special programs within them as they rank-order their preferences. The sole district high school—Cambridge Rindge and Latin—is divided into four "houses." With 1989 enrollment of 7,674 students, ninety-three percent of parents received one of their first set of choices. The previous year Cambridge had developed an extensive parent information system with full-and part-time parent liaisons.

The New Jersey report on school choice cited above, notes that as a result of the Cambridge program of controlled choice

transportation costs have risen substantially, but that integration has increased, and student achievement has shown mixed improvement. The same report quotes research that points out that Cambridge's program has shown that choice among all schools—not just several magnets—has encouraged school improvement.

Limited Number of Magnet Schools
A more common approach to parent choice is also the result of earlier desegregation efforts and involves multiple magnet schools (or magnet programs). Such schools are designed to draw students with innovative and specialized educational programs and result in greater integration. **Prince George's County, Maryland** is one of several districts in the country which, as a part of their desegregation plans, established magnet schools in their districts. Of Prince George's County's 175 schools, forty-four currently have magnet programs serving slightly less than one third of the district's students (30,000 of 102,000 students). The magnet schools' attendance goal is to keep the schools under eighty percent minority or bring the schools' minority average closer to the county average.

A growing body of research about the desegregation and student achievement effects of magnet schools points to the need to review carefully student selection procedures for negative, unintended outcomes. This research also points to the need for comprehensive, district-wide school improvement that eliminates current detrimental impacts on non-selective schools such as loss of "successful" students, loss of capable staff, and resource inequities. Other concerns for non-selective schools include the removal of (formal or informal) procedures for returning students unsuccessful in a magnet school to neighborhood schools and an evaluation of incentives that make neighborhood schools place undue emphasis on recruiting a few high-achieving students instead of stressing the educational improvement of all of their students (Moore and Davenport 1989; Bastian, 1989; New Jersey, 1988).

All Schools Are Magnet Schools
In an attempt to eliminate the disparities noted above that frequently result from a limited number of magnet schools, some districts are trying to create a system where all district schools are considered magnets. One such district is **Montclair, New Jersey** whose schools at the

elementary, middle, and high school levels have curricular themes. The schools consider race, space, and gender for student enrollment. For waiting lists, the district established the criteria (in order) of sibling preference, choice denied in the previous year, "support data" (discipline reports, report cards, attendance, etc.), student retention, and "other data."

The Educational Testing Service evaluated the Montclair schools in 1987 and reported improved academic performance on the Iowa Test of Basic Skills by both black and white students (both scored above the national norm). ETS reported that Montclair had achieved its desegregation goals but also pointed out that compensatory education had a larger number of minority students and honors classes had fewer. The report noted that black parents were concerned about differences in achievement between black and white students.

Alternative Schools
Most urban and many non-urban districts have a variety of alternative educational programs which range from a school-within-a-school for vocational training, to multi-service programs for teenage mothers. In a recent study of fourteen "successful" alternative schools by Gary G. Wehlage et al. (1989) the key finding was that effective alternative schools provide at-risk students with a community of support. Students were actively engaged in the educational program to the extent that the environment was supportive—a professional culture existed among educators that accepted moral responsibility for the students' education and the school provided sufficient autonomy and resources to create innovations appropriate for students' needs. The list below notes the fourteen schools included in the study by Wehlage and his colleagues as examples of choices available in the form of alternative schools:

- Alcott Alternative Learning Center, Wichita, Kansas

- Croom Vocational High School, Upper Marlboro, Maryland

- Lincoln High School, Atlanta, Georgia

- Media Academy (Freemont High School) Oakland, California

- The Minneapolis Federation of Alternative Schools, Minneapolis, Minnesota

  Loring-Nicollet School

  The Minneapolis Education and Recycling Center NA-WAY-EE The Center School Plymouth Christian Youth Center

  Urban League, Street Academy

- New Futures School, Albuquerque, New Mexico

- Orr Community Academy (Two Majors at a Time), Chicago, Illinois

- School-Within-A-School (James Madison Memorial High School) Madison, Wisconsin

- Sierra Mountain High School, Grass Valley, California

- Wayne Enrichment Center, Wayne Township, Indiana

Post-Secondary Education

One last example of an approach to the provision of intradistrict parental choice is access to post-secondary education for high school students. Earlier references to such programs statewide provide an indication of the types of programs and their purposes. That description is appropriate for those districts that make this option available, mainly to juniors and seniors in high school who are considered at risk of dropping out or who wish to pursue advanced course work. While providing choices to a number of students there seems to be little locomotive force by these programs to drive restructuring of the district's schools.

B. DISTRICT EFFORTS TO CHANGE CURRICULUM AND INSTRUCTION

Several school districts are examining various aspects of their curriculum and instructional methods to ensure that they are relevant to the students' lives; are appropriate for the ethnic, cultural and language complexity in most larger districts; and support the development of higher order learning and critical thinking skills. They understand that in order to appropriately and effectively foster higher order learning for all students, the curriculum and instruction must be sensitive to the needs of different groups of students. **Portland, Oregon** has embarked on a major effort to redraft its curriculum.

Three years ago staff of Portland School District's Multi-Cultural Office of the Curriculum Department noted the discrepancy in achievement test scores between white and minority students. In an attempt to eradicate the gap in test scores, staff met with members of the Portland community and developed a plan to create a curriculum that would ensure exposure to all students of the achievements of minorities in the United States. The result of those meetings was the African-American Baseline Essay series.

Developed over three years with assistance of experts nationwide, Portland now has African-American Baseline Essays in art, language arts, math, science, social studies, and music. Designed as a staff development tool, these essays are intended to provide all educators with a baseline of knowledge about the contributions of African-Americans in all fields. Scholars in each field were contracted to write the essays and so build a body of knowledge from which the adults could learn. Parts of some of the essays are considered controversial. All professional staff received the series during 1987-88 and have received related in-service training throughout 1988-89.

Plans have been made to begin American Indian and Hispanic Baseline Essays during 1989-1990. Other plans involve an attempt to have school departments of Curriculum, Instructional Technology, and Vocational Education work with the Multi-Cultural Office to incorporate the Baseline Essays into their programs. It is too early to assess the impact the Baseline Essays series will have on student learning in Portland and if it might help to restructure the provision of instruction.

C. DISTRICT EFFORTS TO SUPPORT NEW ROLES FOR EDUCATORS

Two district-level school restructuring efforts which seek to drive educational improvement by changing the role of the educator—primarily the teacher—are the provision of financial incentives and improved training. One makes use of external incentives, the other provides internal development.

1. Teacher Career Ladders

Career ladders offer financial and oth (e.g., peer recognition) inducements for teachers to be more productive. Rochester, New York is a district which, among other reforms, attempted a dramatic restructuring of its teacher career ladder as a way to improve student performance in the schools. In order to recognize teachers as professionals, Rochester's district administration and teachers' union agreed to change both the responsibilities and the salaries of teachers. In an effort to reverse educational decline the Rochester teacher contract, beginning in 1988-89, required teachers to become accountable for student achievement and to become more closely involved in students' lives. In return the teachers received dramatic salary increases of forty percent over three years. It also gave the superintendent greater control over teacher assignment in order to remedy the problem of inexperienced teachers working with the most demanding students.

In another effort to correct that problem, as well as to enhance the practice, compensation, and opportunities for development and growth of teachers, the new contract established the Career in Teaching (CIT) plan. Unlike other career ladder programs, the CIT plan incorporates the concept of peer review and adds a feature that directs lead teachers to work with at-risk students. The CIT plan creates four grades of teachers:

- **Intern teachers** are all new practitioners without prior teaching experience. As is already the case in Rochester, interns will teach under the guidance of more experienced mentor teachers.

- **Resident teacher** status is earned by those teachers who have successfully completed a year of internship but have not yet achieved tenure or received their permanent certification to teach.

- **Professional teacher** status is conferred only on those who have earned their permanent certification.

- **Lead teachers** are selected on a voluntary but competitive basis by a panel that includes other teachers. They teach part-time and also work as mentors; as consultants who will select textbooks, write curricula, plan staff development programs and direct other instruction-related tasks; or as demonstration teachers who will model teaching with an open door policy. Lead teachers must have at least ten years' experience, work for up to 11 months, and receive a salary differential. They work with students at risk, teach in remedial and/or enrichment programs, serve as adjunct professors in local teacher education schools, and perform other duties that might be required of instructional leaders and expert practitioners. While movement up the ladder is not automatic, lead teachers in Rochester can now make as much as $70,000 in annual salary.

2. Teacher and Administrator Professional Development

The other district-level approach to improvement of teacher performance involves professional development. One district which has created an exemplary professional development academy is Jefferson County, Kentucky. Jefferson County Public Schools (JCPS) established the **Gheens Professional Development Academy** in 1984 to enhance the work of teachers and school administrators by providing services and programs that are designed to promote peer support, to recognize performance, and to increase the variety of intellectual opportunities available to staff. The services and programs provided by the JCPS/Gheens Academy include, according to its literature:

- **Resource groups** for principals, teachers (and beginning teachers) for skills sharing, discussion of topics of common interests, and collegial support.

- **Staff development activities** such as continuing education and special programs (addressing the teaching/ learning process, clinical supervision, and critical thinking).

- **Curriculum Resource Center** which is equipped to assist staff in developing their own instructional materials.

- **Professional Library** and Exceptional Child Education (ECE) Materials Center.

- **Grant Assistance Office** which assists local educators in developing innovative programs and provides technical assistance in the grant application process.

- **Local school improvement projects** such as the Middle Grades Assessment Program, Science and Math Instruction Improvement, Principals as Leaders of Instruction and membership in the Coalition of Essential Schools.

In addition to its variety of in-service programs noted above, the Gheens Academy also oversees the Jefferson County School District's Professional Development Schools (PDS). These schools serve—much like teaching hospitals for intern physicians—to support and assist new teachers and administrators. It also encourages experienced teachers and administrators to experiment with new ideas and so improve their skills. The establishment of the Professional Development Schools was assisted by a grant from the Carnegie Forum on Education and the Economy.

D. ACCOUNTABILITY IN SCHOOL DISTRICTS THAT SUPPORTS SCHOOL RESTRUCTURING

New District Assessment Initiatives
A few districts are actively reviewing their assessment instruments and experimenting with new forms of student assessment in the effort to break the negative impact on teaching for which traditional, standardized, multiple choice tests frequently are responsible.

Pittsburgh, Pennsylvania is a district in the process of multiple experiments with assessment. Since the implementation of its district-wide model—Monitoring Achievement in Pittsburgh (MAP)—in 1982, Pittsburgh has been evaluating students' ability in basic subject areas for all classes K-12. MAP assessments also include specialized areas at the secondary level such as the physical sciences. Pittsburgh's Instructional Cabinets—the decentralized decision-making bodies— use MAP results in their planning of school-based program changes.

The Secondary Examination Program (SEP) provides a more sophisticated system of monitoring students' achievement. Unlike the more commonly used multiple choice tests (the elementary MAP test is still multiple choice), SEP requires students to demonstrate their abilities in several areas. Currently, students write essays in English, Language Arts, and Social Studies as part of the SEP four times per year. Teachers have had substantial in-service training to be able to score appropriately the students' essays.

The Pittsburgh School District has also instituted an assessment in the arts called Arts PROPEL where students present portfolios of work in music and the arts for evaluation. Arts PROPEL is expanding slowly, primarily because of the extensive in-service training required for teachers to participate. Their training takes considerably longer than that given SEP teacher/assessors. While district staff insist that their assessment models do not drive the school restructuring process in Pittsburgh, the linkages between assessment models and instruction appear very strong.

In addition to and in support of state and local district efforts to enact fundamental changes in schooling aimed at providing a dramatically different and more appropriate education for all students, several national organizations have thrown their weight and energy behind a variety of related projects. In some instances a national group provided the impetus for others to design and implement change, in other cases the organization became directly involved with schools and teachers.

The examples in this section illustrate the range of action taken nationwide by education groups, teacher unions and researchers to restructure schooling and improve learning in substantial ways for all students. Not all of the efforts cited have been equally effective to date. In several instances the projects are operating nationwide but actually represent a limited number of pilot efforts in a few sites. While helpful to those sites, important and difficult work remains to infuse the successes made at the pilot schools systemwide through whole districts and among multiple districts statewide. It remains to be seen if the political will and necessary resources will be available at the local, state, and federal levels to ensure widespread restructuring of schooling so that all students, particularly those placed at risk to school success, will graduate with an education of quality and kind that has prepared them adequately for adulthood in the 21st century.

NATIONAL ORGANIZATION AND INDIVIDUALLY FOUNDED PROJECTS

1. American Federation of Teachers

Center for Restructuring
As a base for its efforts in school restructuring the American Federation of Teachers created the AFT Center for Restructuring housed in the AFT Educational Issues Department. The Center supports a number of activities related to the discussion, development, and implementation of school restructuring. These activities include conferences, information dissemination, network building, and original publications. The Center has organized a variety of conferences which include a series of luncheon seminars to discuss research and current projects, a conference in collaboration with the Danforth Foundation and Hammond, Indiana Public Schools of key district leaders from around the country who are implementing new models of shared decision-making, and a joint national conference with the U.S. Department of Labor examining new labor/management cooperation.

The Center on Restructuring acts as a clearinghouse and distributes information about school restructuring both generally and to union locals interested in the redesign of their schools. In a related vein, the Center also provides support to networks of union locals interested in restructuring who then share information among themselves. Center staff are working with local unions and district leaders in the development of case studies which will document the process of school restructuring in several districts.

Perhaps the most visible of the Center's activities is its bi-monthly newsletter *Radius*. Each issue examines a particular element of school restructuring in detail. Thus far *Radius* has published issues focusing on school-based management and professional practice schools, as well as publishing a two-part series on school restructuring and technology. The newsletter has also published a list of suggested readings about school restructuring and an update on schools-within-schools.

Staff of the AFT Restructuring Center are working in cooperation with Apple, Inc. to develop an interactive computer product dealing with school restructuring. The project is only at the conceptual stage but an effort is underway to combine what is currently known about the best practices for and approaches to school restructuring, information from district sites, and reports/interviews from educational organizations with the latest technology developed by Apple. Center staff report that the goal is to provide a rich and varied resource on the topic of school restructuring.

The Center has also received funding from the Exxon Education Foundation to study professional practice schools. These schools would serve as clinical sites for the improvement of teacher practice. The Center for Restructuring will also house and document a network of professional practice school initiatives.

Urban District Leadership Consortium
The American Federation of Teachers (AFT) is actively involved in several districts that are negotiating new relationships between teachers and district management aimed most frequently at restructuring the decision-making process in the schools. A recent outcome of AFT's involvement with school restructuring is the creation of the Urban District Leadership Consortium (UDLC). Formed in May, 1989 the Consortium has

two main purposes: to foster communication among reform-minded urban districts, and to plan and execute educational reform activities of mutual benefit to members. Consortium documents note that such plans include but are not limited to: federal legislative initiatives, national pilot projects, issuance of reports, and positions on educational topics. Cities and districts that participated in the conference that created the Consortium include:

Albuquerque, New Mexico
Baltimore, Maryland
Boston, Massachusetts
Chicago, Illinois
Cincinnati, Ohio
Dade County, Florida
Hammond, Indiana
Kansas City, Missouri
Los Angeles, California
Minneapolis, Minnesota
Newark, New Jersey
New York, New York
Philadelphia, Pennsylvania
Pittsburgh, Pennsylvania
Rochester, New York
St. Paul, Minnesota
Syracuse, New York
Toledo, Ohio
Washington, DC

Active UDLC members are urban school districts which promote labor-management cooperation, participatory leadership, and the restructuring of learning and teaching. Associate UDLC members are non-voting participants interested only in staying current with the discussions of restructuring. UDLC has a third tier of affiliates called "consultants" which includes invited organizations or individuals with strong interest in the work of the consortium (although with no collective bargaining or policy making responsibilities).

2. Carnegie Forum on Education and The Economy: *A Nation Prepared*

In 1986 the Carnegie Forum on Education and the Economy's Task Force on Teaching as a Profession released its report—*A Nation Prepared: Teachers for the 21st Century*—which many refer to as one of the major initiators of the focus on school restructuring. *A Nation Prepared*

examines four major areas. It reports on the changing nature of the world economy. It explains that there are two choices facing the United States: accept prevailing world wage levels for low-skilled and semi-skilled labor and the ensuing decline in current living standards, or revise the role of the worker and emphasize widespread use of highly skilled workers, supported by advanced technologies. This second, obvious, choice requires dramatically increased educational standards and higher outcomes than those currently realized.

The Carnegie report's second section describes the changes in the demography of the teaching force. It explains that since 1985 the United States has reached a turning point regarding teacher supply and demand. A declining pool of potential teachers from which to choose, the pending retirement of a very large ercentage of current teachers, and c hool entrance of the baby "boomlet" create a steep demand for new teachers—particularly for minority teachers.

The third major section of the Carnegie report has to do with the assertion that current national economic difficulties can be eased—to a large extent—by creating a cohort of the "finest teachers obtainable," and so sufficiently improve the quality of teaching and learning that later school graduates will provide a large, highly-skilled workforce necessary to successfully compete in world trade. Teacher selection and preparation standards will be raised, good teachers will be recruited and retained, and schools will be restructured to make best use of these teachers. These efforts are to be part of a strategy to "professionalize" the teaching field.

The goal of the Task Force is to create conditions—pay, autonomy, and career opportunities—necessary to draw highly qualified individuals into teaching who might otherwise take up a different profession. With a high quality teaching force, their argument continues, teachers would accept greater accountability for student performance and use their increased autonomy to transform or restructure the school into a newly effective and challenging learning environment. Restructured schools would thus provide an education which will prepare young people for a better-paying high technology workforce.

In the fourth section of the report, the Task Force lays out its framework for dramatically changing the nature of the teaching force. In considerable detail, it explains how this new plan should be implemented. The plan's major elements include:

- Create a National Board for Professional Teaching Standards, organized with a regional and state membership structure, to establish high standards for what teachers need to know and be able to do, and to certify teachers who meet that standard.

- Restructure schools to provide a professional environment for teachers, freeing them to decide how best to meet state and local goals for children while holding them accountable for student progress.

- Restructure the teaching force, and introduce a new category of Lead Teachers with the proven ability to provide active leadership in the redesign of the schools and in helping their colleagues to uphold high standards of learning and teaching.

- Require a bachelors degree in the arts and sciences as a prerequisite for the professional study of teaching.

- Develop a new professional curriculum in graduate schools of education leading to a Master in Teaching degree, based on systematic knowledge of teaching and including internships and residencies in the schools.

- Mobilize the nation's resources to prepare minority youngsters for teaching careers.

- Relate incentives for teachers to school-wide student performance, and provide schools with the technology, services and staff essential to teacher productivity.

- Make teachers' salaries and career opportunities competitive with those in other professions.

The Task Force insists that all eight strategies must be implemented; the list is not one from which policymakers can choose and implement only those features that "cost little in organizational trauma or dollars."

One concrete outcome of the report—supported by both concept and funding—is the National Board for Professional Teaching Standards. A more detailed description of the Board's efforts is provided later in this report.

3. Coalition Of Essential Schools

In 1984 the Coalition of Essential Schools was formed as a university-high school partnership aimed at improving student learning by fundamentally altering the adult-student relationship normally found in schools. The creation of the Coalition was preceded by a national study of secondary education in the United States from 1981 to 1984 co-sponsored by the National Association of Independent Schools.

The Study of High Schools— the result of that study—identifies five directives or imperatives for improved schools. They include: allowing teachers and students the flexibility to work in ways they find most appropriate; requiring that students exhibit mastery of their work; providing appropriate and effective incentives for students and teachers; emphasizing intellectual rigor on the part of students; and keeping the structure simple and flexible.

Horace's Compromise: The Dilemma of the American High School by Theodore Sizer (1984) details the rationale for the directives. Sizer now directs the Coalition of Essential Schools, founded in 1984, at Brown University. Based on the belief that no one model of educational structure is universally appropriate, the Coalition is bonded by a glue of "common principles" regarding education practice. Each school develops its own plan to implement these principles which act as the Coalition's common educational ideology. Great emphasis is placed on "personalization" of education—where students are known well by the adult educators.

As part of the effort to personalize schooling, the Coalition recommends a reduced teacher-to-pupil ratio (no more than one teacher to eighty students in secondary school rather than the usual 130 students). Other recommendations flow from the core of the Coalitions' nine "Common Principles" which are:

1. The school should focus on helping adolescents to learn to use their minds well. Schools should not attempt to be "comprehensive" if such a claim is made at the expense of the school's central intellectual purpose.

2. The school's goals should be simple: that each student master a limited number of essential skills and areas of knowledge. While these skills and areas will, to varying degrees, reflect the traditional academic disciplines, the program's design should be shaped by the intellectual and imaginative powers and competencies that students need, rather than necessarily by "subjects" as conventionally defined. The aphorism "Less Is More" should dominate: curricular decisions should be guided by the aim of thorough student mastery and achievement rather than by an effort merely to "cover content."

3. The school's goals should apply to all students, while the means to these goals will vary as those students themselves vary. School practice should be tailor-made to meet the needs of every group or class of adolescents.

4. Teaching and learning should be personalized to the maximum feasible extent. Efforts should be directed toward a goal that no teacher will have direct responsibility for more than eighty students. To capitalize on this personalization, decisions about the details of the course of study, the use of students' and teachers' time and the choice of teaching materials and specific pedagogies must be unreservedly placed in the hands of the principal and staff.

5. The governing practical metaphor of the school should be student-as-worker, rather than the more familiar metaphor of teacher-as-deliverer-of-instructional-services. Accordingly, a prominent pedagogy will be coaching, to provoke students to learn how to learn and thus to teach themselves.

6. Students entering secondary school studies are those who can show competence in language and elementary mathematics. Students of traditional high school age but not yet at appropriate levels of competence to enter secondary school studies will be provided intensive remedial work to assist them quickly to meet these standards. The diploma should be awarded upon a successful final demonstration of mastery for graduation—an "Exhibition." This Exhibition by the student of his or her grasp of the central skills and knowledge of the school's program may be jointly administered by the faculty and by higher authorities. As the diploma is awarded when earned, the school's program proceeds with no strict age grading and with no system of "credits earned" by "time spent" in class. The emphasis is on the students' demonstration that they can do important things.

7. The tone of the school should explicitly and self-consciously stress values of unanxious expectation ("I won't threaten you but I expect much of you"), of trust (until abused) and of decency (the values of fairness, generosity and tolerance). Incentives appropriate to the school's particular students and teachers should be emphasized, and parents should be treated as essential collaborators.

8. The principal and teachers should perceive themselves as generalists first (teachers and scholars in general education) and specialists second (experts in but one particular discipline). Staff should expect multiple obligations (teacher-counselor-manager) and a sense of commitment to the entire school.

9. Ultimate administrative and budget targets should include, in addition to total student loads per teacher of eighty or fewer pupils, substantial time for collective planning by teachers, competitive salaries for staff and an ultimate per-pupil cost not to exceed that at traditional schools by more than ten percent. To accomplish this, administrative plans may have to show the phased reduction or elimination of some services now provided students in many traditional comprehensive secondary schools.

According to the Coalition, schools are selected as participants based on four criteria: diversity (ensuring a mixture of school types and locations); agreement with the "Common Principles"; commitment of moral, professional, and financial support for necessary changes; and commitment by school staff and leaders to the project. The governing authorities of participating schools commit themselves to four years of activity and must pledge financial support for the following categories of need: planning, principal support, project development, travel, on-site Coalition meetings, consultants, materials, and modest renovation where necessary.

Beginning with twelve charter schools, the Coalition had grown to include over fifty public and private schools by 1988. In that year a committee studied the Coalition and prepared an evaluation report. The committee focused on three objectives: to assess the quality of the documentation and evaluation efforts in place, to assess the progress of the Coalition reform effort at the school and classroom level, and to comment on the development of the Coalition itself.

The committee surveyed the fifty-two schools in the Coalition and received thirty-one responses. The report notes that of all of the Coalition schools, private schools far out number urban public schools and that the Coalition has not been successful in establishing a school-wide program in a typical inner city school. The report does point out that two alternative inner city schools have programs and that several other urban sites have school-within-school programs. The Coalition has not been entirely successful in its attempt at diversity. The committee reports the following statistics describing diversity of the thirty-one Coalition schools that responded to the survey:

COALITION SCHOOLS' MINORITY ENROLLMENT

Percentage of Minority Students Enrolled	Number of Coalition Schools
less than 10%	19
10-20%	3
20-50%	6
more than 50%	3

ENROLLMENT OF LOW INCOME STUDENTS IN COALITION SCHOOLS

Percentage of Enrollment for Free or Reduced-Price Lunch	Number of Coalition Schools
0% or not applicable	10
less than 10%	11
10-20%	3
20-50%	5
more than 50%	2

The committee—based on its survey and site visits—reported that "personalization" was very evident in the schools. Teachers knew students well, created substantial adult-student bonds, and had important knowledge of the student as a person. Personalization was reported as most evident in those settings which had been "restructured" (i.e., where teaching had been redesigned to involve interdisciplinary teams or "houses". Houses are arranged so that five teachers serve approximately 75 students).

The committee reported mixed results of the effort to have "students as workers" in the classroom. They "heard more than saw" success in that endeavor. Nevertheless, several teachers remarked that before participating in the Coalition, they made use of successful practices— small groups, independent work, exploration of interesting questions in depth, use of a variety of media—only with their best students. Now those teachers use the successful techniques with all students. Difficulties were reported when participants attempted more radical departures from traditional practice to revise curriculum or to develop exhibition assessments. The committee noted that few schools have been restructured and that those Coalition schools that have restructured are either small alternative schools or those "dependent on charismatic leadership."

The committee's conclusions were several. It praised the Coalition for initiating a new dialogue regarding the fundamental nature of teaching and for supporting a set of experiments in a variety of schools that led to real change. The changes that were most evident (and easiest to achieve) related to the principles of personalization and student as worker. The Coalition has been more successful in creating successful schools-within-schools than in school-wide change or restructuring. The committee reports that it saw very limited success with exhibitions of student work. It also noted its inability to obtain data to make any claim regarding success with no more than a ten percent increase in budget. Finally, it pointed out that only about one-third of the schools have made a school-wide commitment to the Coalition program.

4. Education Commission of the States: Re:Learning From the Schoolhouse to the Statehouse

At the 1988 Annual Meeting of the Education Commission of the States (ECS), several states joined with the Coalition of Essential Schools in a project called Re:Learning From the Schoolhouse to the Statehouse. This joint venture combines the educational framework and approach of the Coalition with a commitment by the states "to improve student learning by redesigning [the] state's education system," according to ECS literature. Six states— **Arkansas, Delaware, Illinois, New Mexico, Pennsylvania, and Rhode Island**—committed themselves for five years to the project which will attempt to incorporate the Coalition's "Common Principles" outlined earlier. Coalition staff will provide—in conjunction with regional university staff—assistance with the development of curricula, budgets, evaluation methods and techniques. ECS pledged to work with state and local educators and policymakers to identify necessary changes in current policy. Policies concerning accountability and assessment, school finance, state curriculum, and staff development are examples of potential problem areas.

As currently organized there are three categories of state involvement in Re:Learning:

1. **Networking states**—states that are not in a position to be fully involved in Re:Learning but want to be kept informed about what is happening in Re:Learning states and schools and interact with those involved in Re:Learning. People from schools and states in this category will be on a mailing list and be invited to conferences/seminars.

2. **"Considering participation" states**—states where there is interest in participation within schools, districts and at the state level. These states would engage in a number of activities that would help them sort out if and how they should move to become a participating state.

3. **Participating states**—states that are fully involved in using the Re:Learning approach in their state. These states will have participating schools, and an established cadre and steering committee to focus on the restructuring of the full education system.

Before a state becomes a participating state in the project it must meet several conditions including: clear support from the governor and chief state school officer, sound commitments for participation from at least five schools, hiring of a fulltime state coordinator, a commitment to develop a local/state cadre to support a continuation of the project efforts, a commitment of sufficient district and state funding ($50,000/school/year) to underwrite school planning, and a plan to document and assess the progress of the effort.

District and state leaders in a Re:Learning state work on changes in administration and policy that respond to and support the work of the schools. Some of the policy areas ECS has suggested that might need to be changed include school and student assessment, teacher certification, resource allocation, management, leadership, graduation requirements, and support systems for teachers and schools.

ECS has identified several principles which should direct the redesign of policy and administrative practice by state and school district leaders:

- **Build a new vision of education.** The public, business and state leaders and education professionals should build a new shared vision of how the state's education system should work to ensure that all students have an equal opportunity to use their minds well through meaningful teaching and learning experiences.

- **Organize on behalf of student learning.** The roles and responsibilities within the education system and the manner in which resources are allocated should be redesigned to support the best learning for all students, not bureaucratic or political interests.

- **Create new working relationships.** Collaboration, shared leadership, and mutual responsibility should serve as the model for working relationships throughout the education system.

- **Develop a culture of learning.** Adults throughout the system should come to see themselves as continual learners and problem-solvers rather than purveyors of "right" answers and standardized solutions.

- **Develop coherence and meaning in all actions.** Actions, information and data must be focused on moving together toward the shared vision of a new education system. Too often the education system is so bogged down with information and actions in bits and pieces that meaning is lost.

- **Act with regard for people.** Long-and short-term actions to rebuild the education system should be balanced in ways that treat people with dignity and respect.

5. Joining Forces

The variety and severity of problems facing so many young people in school demands, as stated earlier, a radical review of how services—both education and related social services—are provided. Schools as they currently operate and are organized do not ensure educational success for every student, nor do they effectively support efforts by social service agencies trying to provide supportive and critical health and social welfare assistance. Neither effort can be fully successful alone, nor can one succeed while the other languishes.

Rather, there may be greater success if the two systems work in collaboration—something which requires fundamental changes in both schools and welfare programs.

In an attempt to promote and assist the foundation of linkages among the education, welfare, and child welfare systems on behalf of children and families at risk, Joining Forces was initiated as a project in 1987. The stated goals of the project are to: help disadvantaged and high-risk families better support their children's education; help schools improve the academic achievement of students at risk, thereby increasing the likelihood that these children will stay in school and graduate; and help assure that individuals of all ages have access to and are supported in obtaining the education and training necessary for their own and their family's well-being and economic self-sufficiency.

In its first year of operation Joining Forces, operating under the early sponsorship of the National Association of State Boards of Education (NASBE), convened state human service commissioners, chief state school officers, and state board of education chairs at a Wingspread Conference. The purpose of the meeting was to begin the development of a common agenda focusing on children and families at risk. The project also conducted a national survey to identify existing collaborative efforts at the state and local level. The results of these activities are described in its publication, *Joining Forces: A Report From the First Year* (Levy, 1989).

Responding to the urgency of and the opportunity for collaboration between the education and welfare sectors, the project will continue to promote and assist joint action through five areas of activity. Now jointly sponsored by the American Public Welfare Association (APWA) and the Council of Chief State School Officers (CCSSO), Joining Forces plans the following activities as funding becomes available:

- **Collect and disseminate information on successful examples of collaboration,** so that useful experience gained in one place is available to help encourage others to take action;

- Develop a conceptual framework for and define the expected outcomes of expanded collaboration in order to ensure a broad perspective and to guide joint action;

- Foster dialogue among the leaders and staff of people-serving systems to increase cross-section understanding, plan joint action, and develop strategies to overcome any barriers that emerge;

- Assist states in the development and evaluation of collaborative approaches, so that the complexities and frustrations of pursuing joint action can be overcome and promising approaches brought to successful completion; and

- Encourage joint action among the various organizations at the national level to support state and local collaborative efforts.

The timeliness and importance of joint action has been heightened in recent months with enactment of the Family Support Act of 1988. A significant step toward reform of the nation's public welfare system, the Family Support Act underscores the centrality of education in helping people become self-sufficient.

THE FAMILY SUPPORT ACT OF 1988

This description of the major education-related components of the Family Support Act is taken from *New Partnerships: Education's Stake in the Family Support Act of 1988* (1989), a statement by nine national education, social welfare, legal, and business organizations.

With the passage of Public Law 100-485, the Family Support Act of 1988, a substantial reform of the public welfare system began. If the Act is to be successful—as measured by strengthened families and help toward real self-sufficiency—education, employment training, health, public welfare, and other sectors must work together.

The major program components of the Family Support Act (FSA) include: child support enforcement, child care transitional services, assistance to two-parent families, and—the provision which will probably affect educators the most—comprehensive education, training, and employment-related services.

The Job Opportunities and Basic Skills Training Program (JOBS) consolidates and replaces existing welfare/work provisions. For the first time, federal law mandates that educational services must be available to participants in welfare-to-work programs.

At a minimum, educational services must include high school or studies leading to an equivalency diploma (GED), remedial education to achieve a basic literacy level, and education for individuals with limited English proficiency. States may also choose to offer additional educational services, including college or other postsecondary education or training. Employ-

ment-related services must include job skills training, job-readiness activities, and job placement and may include a variety of other activities. In some cases, welfare agencies may encourage private sector employers to hire recipients by providing a salary subsidy in the initial months of employment.

Who will participate in the JOBS program?

Most healthy adult and adolescent parents receiving welfare can be allowed or required to participate if child care is available. What is expected in terms of participation will depend on an individual's degree of job readiness and her/his career goals.

It is unlikely that everyone potentially subject to JOBS requirements will be included right away. Within certain parameters, the federal law permits a state to phase in the JOBS program and to tailor program designs and requirements to fit the needs of recipients and the services available in various parts of the state.

Although states are provided considerable discretion in determining whom to serve first, the law stipulates that a state may receive its full share of federal funding only if at least fifty-five percent of JOBS funds are expended on four target groups considered especially at risk:

- parents under age twenty-four who have not completed and are not enrolled in high school or its equivalent;

  parents under age twenty-four who have little or no work experience;

- individuals who have received public assistance for at least thirty-six of the last sixty months; and

- members of a family who will lose AFDC eligibility within two years because the youngest child, by virtue of age, will no longer qualify as a "dependent child."

FSA provides that, within target groups, those who volunteer must be served first.

Who will receive educational services?

With few exceptions, some form of education must be offered to any JOBS participant who lacks a high school diploma or equivalent. Under that broad umbrella, the Act specifically cites several groups whose past educational experience and/or current circumstances suggest that they will need special help:

- adolescent parents of school age;

- young parents just beyond traditional school age, ages 18 and 19, who have not completed high school or its equivalent; and

- parents over age 20 who lack a high school diploma, to the extent they are required under the state plan to participate in the JOBS program.

In addition, states may choose to offer special services to those who have a diploma or GED but who still lack the basic literacy skills needed for employment. States may also choose to offer postsecondary education as a JOBS option (New Partnerships, 1989).

6. National Board for Professional Teaching Standards

Sparked by the Carnegie report, *A Nation Prepared: Teachers for the 21st Century*, the sixty-three member National Board for Professional Teaching Standards has defined what it believes classroom teachers should know and be able to do. It has taken the Board two years to develop a definition of good practice and will take three additional years to craft the assessment methods necessary for board certification which is scheduled to begin in 1993.

Established in 1987, the Board is identifying criteria and standards for professional, rigorous evaluation necessary for Board certification, much like current professional evaluators in medicine. It is moving to complete four major tasks:

- Developing national standards for knowledge about and ability to implement excellent educational practice;

- Developing measures of assessment that are both research-based and fair;

- Supporting discussion and debate about major education policy and reform issues of the next decade; and

- Raising substantial research and development funds to support implementation of new assessment and Board certification.

In its effort to develop standards of educational practice, the National Board for Professional Teaching Standards has identified five core propositions. In a recent report by the Board, *Toward High and Rigorous Standards for the Teaching Profession*, it outlines those propositions:

- **Teachers are committed to students and their learning**

Board-certified teachers are dedicated to making knowledge accessible to all students. They act on the belief that all students can learn. They treat students equitably, recognizing the individual differences that distinguish their students one from the other and taking account of these differences in their

practice. They adjust their practice, as appropriate, based on observation and knowledge of their students' interests, abilities, skills, knowledge, family circumstances, and peer relationships.

Accomplished teachers understand how students develop and learn. They incorporate the prevailing theories of cognition and intelligence in their practice. They are aware of the influence of context and culture on behavior. They develop students' cognitive capacity and their respect for learning. Equally important, they foster students' self-esteem, motivation, character, civic responsibility, and their respect for individual, cultural, religious, and racial differences.

- **Teachers know the subjects they teach and how to teach those subjects to students.**

Board-certified teachers have a rich understanding of the subject(s) they teach and appreciate how knowledge in their subject is created, organized, linked to other disciplines and applied to real world settings. While faithfully representing the collective wisdom of our culture and upholding the value of disciplinary knowledge, they also develop the critical and analytical capacities of their students. Accomplished teachers command specialized knowledge of how to convey and reveal subject matter to students. They are aware of the preconceptions and background knowledge that students typically bring to each subject and of strategies and instructional materials that can be of assistance. They understand where difficulties are likely to arise and modify their practice accordingly. Their instructional repertoire allows them to create multiple paths to the subjects they teach, and they are adept at teaching students how to pose and solve their own problems.

- **Teachers are responsible for managing and monitoring student learning**

Board-certified teachers create, enrich, maintain, and alter instructional settings to capture and sustain the interest of their students and to make the most effective use of time. They are also adept at engaging students and adults to assist their teaching and at enlisting their colleagues' knowledge and expertise to complement their own.

Accomplished teachers command a range of generic instruction techniques, know when each is appropriate, and can implement them as needed. They are as aware of ineffectual or damaging practice as they are devoted to elegant practice.

They know how to engage groups of students to ensure a disciplined learning environment, and how to organize instruction to allow the school's goals for students to be met. They are adept at setting norms for social interaction among students and between students and teachers. They understand how to motivate students to learn and how to maintain their interest even in the face of temporary failure.

Board-certified teachers can assess the progress of individual students as well as that of the class as a whole. They employ multiple methods for measuring student growth and understanding and can clearly explain student performance to parents.

- **Teachers think systematically about their practice and learn from experience**

Board-certified teachers are models of educated persons, exemplifying the virtues they seek to inspire in students-curiosity, tolerance, honesty, fairness, respect for diversity, and appreciation of cultural differences-and the capacities that are prerequisites for intellectual growth: the ability to reason and take multiple perspectives, to be creative and take risks, and to adopt an experimental and problem-solving orientation.

Accomplished teachers draw on their knowledge of human development, subject matter, and instruction, and their understanding of their students to make principled judgments about sound practice. Their decisions are not only grounded in the literature, but also in their experience. They engage in lifelong learning which they seek to encourage in their students. Striving to strengthen their teaching, board-certified teachers critically examine their practice, seek to expand their repertoire, deepen their knowledge, sharpen their judgment, and adapt their teaching to new findings, ideas, and theories.

- **Teachers are members of learning communities**

Board-certified teachers contribute to the effectiveness of the school by working collaboratively with other professionals on instructional policy, curriculum development, and staff development. They can evaluate school progress and the allocation of school resources in light of their understanding of state and local educational objectives. They are knowledgeable about specialized school and community resources that can be engaged for their students' benefit, and are skilled at employing such resources as needed.

Accomplished teachers find ways to work collaboratively and creatively with parents, engaging them productively in the work of the school.

7. National Education Association

The National Education Association has initiated a project which it describes as a major organizational effort to support the restructuring of schools to improve learning, the Learning Laboratories Initiative.

The Learning Laboratories Initiative
In February 1989, representatives of twenty-six NEA state affiliates met in Washington to begin work on the union's Learning Laborato ies Initiative which will establish a network of at least one school district in each state that will function as a "learning lab." The lab districts will experiment with innovations they consider necessary to improve education.

NEA has provided $450,000 for the project's initial year to support research, technical assistance, start-up costs and information dissemination for the districts. T ie union will also contract with experts to develop an appropriate assessment/evaluation for each district. This combined assistance, according to NEA, will support the districts' efforts to improve areas such as curriculum, teaching methods, shared decisionmaking, and school/university partnerships. Districts must ensure the availability of time and resources for necessary planning and training.

Current plans assume that it will take five years to establish the network nationwide. In early July NEA announced the first three districts which will act as learning labs. NEA staff explained that two preconditions must exist for districts to be considered as learning labs. The NEA state affiliates will determine the state's involvement in the program and NEA will consider a local district as a learning lab only if the state NEA affiliate recommends district participation.

The basic criteria for selection beyond those two preconditions include:

- Projects must be developed through consensus of all stakeholders.

- In order to permit experimentation for a given purpose, stakeholders must commit to flexibility in application of existing regulations, policies, and agreements for a stated period of time.

- The plans for instructional improvement must be based on clearly defined goals, draw on pedagogical research, and provide for a clearly defined method of evaluation.

- Accountability must be designed in a manner consistent with the specific goals and circumstances of the project.

- The project plans must provide sufficient resources and time for the support and training of all participants.

- Learning Laboratories will be in schools under the aegis of a public school district.

- A Learning Laboratory may work collaboratively with public and private higher education institutions.

- A Learning Laboratory must use the collective bargaining process, where collective bargaining exists, to achiev·· increased pedagogical options.

A second group of three or four learning lab districts will be announced sometime in the Fall of 1989.

The Mastery in Learning Project
Another NEA project designed for School Improvement has the potential for assisting individual schools interested in restructuring their educational programs. Begun in 1985, this reform

project links N_A members to current research regarding school improvement. Twenty-six elementary, middle, junior and senior high schools in eighteen states are project participants. These schools, according to NEA, represent 23,000 students, 1,250 teachers, 475 support staff and 68 school administrators. Described as a "research and demonstration school-based, improvement effort," the purpose of the project is to provide school staff and students with the required resources, time, motivation, skills and attitudes to change their schools in ways that support self-renewing inquiry. The twenty-six participating schools receive special supportive funding, a bank of substitute days and assistance both from the regional education laboratories and NEA national staff.

Project literature notes four essential assumptions that guide its approach to school renewal:

- A school's curriculum must have content, integrity, and social significance.

- A school community must hold high expectations for its students.

- The central priorities of schools—learning, teaching, curriculum—must guide all other educational decisions.

- Every decision about learning and instruction that can be made by a local faculty must be made by that faculty.

The project recommends a four-step site-based approach to school improvement. Project participants have reportedly completed the first two steps—developing a school profile and producing a faculty priorities inventory—and are engaged in the third step which is empowering the school faculty. To assist in faculty empowerment each MIL school employs a part-time project consultant who secures resources, and works with staff in planning, implementation, evaluation, budgeting, and professional development activities related to the improvement goals.

Additional assistance is available in the form of two electronic networks. Teaching Resources and Knowledge (TRAK) is the Project's basic collection of information about school renewal. The Project also participates in a partnership with IBM using PSInet Software (People Sharing Information network). PSInet links fifty sites nationwide and includes the twenty-six MIL schools, representatives of the Coalition of Essential Schools, the National Network for Educational Renewal, federally-funded research and development labs, Holmes Group universities and the MIL office. These groups have access both to electronic mail/communication and broad research and data about school restructuring.

The fourth and final step of the Mastery in Learning Project's school renewal effort emphasizes restructuring the school. The project publications are not very clear about how the actual restructuring will occur. They point out that approaches to restructuring take many forms and that the project focuses on all of the "commonplaces of schooling"—those that shape the learning, teaching, curriculum, and culture/climate of the school. One exercise in the MIL program, called "Building the New Forms of Schooling", is designed to introduce faculty to the concept of school restructuring and to elicit discussion about available options in eight "decision areas": evaluation of learning, teaching styles, professional development, curriculum content, organization of the academic program, faculty interpersonal relationships, and leadership roles. A major goal of this exercise is to help teachers "internalize the idea that options exist to present practice."

8. National Network for Educational Renewal

The National Network for Educational Renewal was designed as an educational improvement initiative and organized to join select universities and nearby school districts in close-working collaboratives. Its original idea was first announced by John Goodlad at the 1985 Summer Institute of the Council of Chief State School Officers. In the Fall of that year the University of Washington opened the Center for Educational Renewal with Goodlad as its director.

Beginning in 1986 with ten school-university partnerships in as many states, the National Network for Educational Renewal (NNER) now includes collaboratives in fifteen states: **Arizona, Arkansas, California, Colorado, Connecticut, Hawaii, Indiana, Maine, Massachusetts, Michigan, New York, Utah, Virginia, Washington, and Wyoming**. This network of collaboratives includes 115 school districts and sixteen universities. All members have made an initial commitment to the joint effort for five years.

Goodlad acknowledges the poor history of collaboration between elementary and secondary educators and their counterparts in higher education. But despite such a record, he created the Network to develop a partnership to bring school districts and universities together for the purpose of simultaneously improving schooling and the education of educators. He argues in favor of a partnership approach for several reasons. When successful it allows the transfer of information, helps develop a critical mass of innovators, unleashes creative energies of educators, supports individual and institutional growth, and is an alternative to legislative action as a way to redirect schools to improve learning.

In its literature, the Network stresses that the restructuring of schools to improve learning and the appropriate preparation of teachers should be the primary focus of all participants. Goodlad writes that the mission statement of the NNER breaks down the overarching goal into three derivatives which call for:

1. The exemplary performance by universities of their educational responsibility to those seeking to become educators or to enhance their present performance as educators. (This includes increasing the usefulness of research.)

2. The exemplary performance by schools of their educational function and accompanying exemplary performance by school districts in providing the necessary support.

3. The exemplary performance of both universities and schools (and their districts) in collaborative arrangements and processes that promote both of the above purposes (Goodlad, 1988).

In the winter and spring of 1988 Calvin Frazier (1988) evaluated the Network and, while calling for continuation of Network activities, records several disappointments. Frazier identifies six partnerships among the fourteen he studied that have made significant strides. He examined several questions regarding the functioning of the partnership—Who is involved? How committed are they? What are the expectations for the partnership? How is the work being organized? What task forces re in place and what are they doing? What is working well and not working well? Frazier organized his report under five headings: internalization of the partnership goal (i.e., a goal to improve schooling and the education of educators), agenda setting, operational issues, reactions of the participants to the concept and each other, and issues relating to research and inquiry.

While offering considerable insight into the organizational dynamics of the Network partnerships, the Frazier report says nothing about changed learning outcomes in schools as a result of Network activities. One finding worth noting, however, is his comment that in contrast to what seems a national discussion about school restructuring by governors, chief state school officers, legislators, and reform advocates "this was not a phrase that was uniformly accepted by educators [in the partnerships]." Several educators within the Network disagreed strongly with the notion that,"...the present school structure is bad and needs a total overhaul." The word "restructuring" was too harsh for several participants who preferred the term "school improvement."

9. The Paideia Proposal

Mortimer Adler published *The Paideia Proposal: An Educational Manifesto* in 1982. Drawing on the Greek *pais, paidos*—the upbringing of a child—Adler titled his work to reflect his notion of how children and youth should be educated. He begins his manifesto with the explanation that schooling has three objectives: preparation for earning a living, preparation for the duties of

citizenship in a democracy, and preparation for self-development. Based on the firm assumption that all students can learn, he calls for the same course of study for all students and the elimination of specialized courses and electives.

Adler's approach to schooling includes three kinds of teaching: didactic teaching for subject matter, coaching that produces the skills of learning, and Socratic questioning in seminar discussions. The results of these three kinds of teaching should be: the acquisition of organized knowledge, the formation of habits of skill in the use of language and mathematics, and the growth of the mind's understanding of basic ideas and issues. Adler details this approach in his first work as well as his two subsequent volumes, *Paideia Problems and Possibilities: A Consideration of Questions Raised by the Paideia Proposal* (1983); and *The Paideia Program: An Educational Syllabus* (1984).

He argues that implementation of his "three columns" of teaching will force the restructuring of schools and result in a broader and deeper education—one of higher order learning and critical thinking—for all students. He insists, "There are no unteachable children. There are only schools and teachers and parents who fail to teach them." Central to his pedagogical argument is the undemocratic result of current school practice; he sees universal high quality schooling as the only path to democracy.

Perhaps the strongest and best known of the three teaching approaches is the Socratic seminar which teachers, trained in the Paideia methodology, frequently cite as the cause for dramatically improved student discussion and learning. Criticisms of the Euro-centered syllabus have prompted an expansion of readings to include Latin American, African, and Asian literature.

Despite advanced age, Adler travels, giving lectures about his method and demonstrating Paideia practice with students in schools. He has established a national center as a base for the Paideia Network which now includes over one hundred schools (mostly programs within schools) that have adopted the Paideia Program. The National Paideia Center at the Frank Porter Graham Child Development Center, University of North Carolina, Chapel Hill sponsors training and provides research and disseminates information to schools in the network. It plans to develop twelve regional demonstration schools nationwide to function as centers for expansion of the Network of schools. Other plans include possible collaboration with American Federation of Teachers' school restructuring programs.

Very few schools have adopted the Paideia approach as their entire school program. Most include it in their humanities block or as a "Wednesday revolution" seminar, according to Dr. Patricia Weiss, director of the National Center. She reports that Cincinnati, Ohio has a high school that now uses the Paideia program schoolwide.

The box below depicts the three main Columns of Learning as designed by Mortimer Adler in his Paideia Proposal.

The three columns do not correspond to separate courses, nor is one kind of teaching and learning necessarily confined to any one class (Adler, 1982).

	Column One	Column Two	Column Three
Goals	Acquisition of Organized Knowledge	Development Of Intellectual Skills—Skills of Learning	Enlarged Understanding of Ideas and Values
	by means of	*by means of*	*by means of*
Means	Didactic Instruction Lectures and Responses Textbooks and other aids	Coaching, Exercises, and Supervised Practice	Maieutic or Socratic Questioning and Participation
	in three areas of subject-matter	*in the operations of*	*in the*
Areas, Operations and Activities	Language, Literature, and the Fine Arts; Mathematics; and Natural Science, History, Geography, and Social Studies	Reading, Writing, Speaking, Listening, Calculating, Problem-Solving, Observing, Measuring, Estimating, Exercising Critical Judgment	Discussion of Books (not Text-Books) and Other Works of Art, and, Involvement in Artistic Activities e.g., Music, Drama, Visual Arts

VII. Conclusion

This report has attempted to provide an overview of the efforts to restructure schools. Its purpose is to provide a comprehensive view of the variety of experiments, programs, structural alterations, and innovations which bear the label school restructuring.

A few of the examples in this report represent efforts which have altered the structure of schooling in fundamental ways and have resulted in improved learning for more students. In those successful settings students are actively engaged in learning and are more able to think critically, to analyze their world in a systematic fashion, and to communicate their findings in productive ways. They point to areas where decisionmaking; learning goals; structures of time, place, grouping, and knowledge; teacher training and development; instructional methodologies; accountability; and assessment have been successfully and fundamentally altered in ways that support dramatically improved learning for all students.

Serious challenges remain however. Much of the effort and energy involved in school restructuring is directed at the means—decisionmaking, instruction, professionalization, or assessment— instead of the ends—student learning.

A second problem has to do with who is served by school restructuring. In several of the examples cited in the report the projects are not explicit about the student populations they serve. To what degree are students who have been placed at risk affected by these changes? Are schools restructured primarily for students who would otherwise succeed or are programs and projects truly changing the educational circumstances for students at risk?

Third, is a rather remarkable silence in the literature reviewed for this report regarding the particular and complex needs of language minority students. Much of what is written regarding efforts and proposals to restructure schools for dramatically improved learning is silent on the basic and growing issue of the education of students who do not speak English as their first language.

Fourth, too little attention has been given to connecting schooling to families. Exciting programs for parent education and family involvement in schools exist now but too many schools do not make substantial, respectful, and effective bonds with the parents and families of the students they serve. As Reginald Clark's research shows clearly, schools cannot be as successful as they might wish if they do not help expand the literacy-enriching activities of students within and outside of schools.

Fifth, educators at all levels must work more flexibly and creatively with colleagues in the social service agencies and community organizations. Much restructuring has not gone very far in this direction (Cf. Comer, 1988; Goodlad 1984; Zigler, 1988).

The numbers of schools involved in school restructuring projects and the allocation of resources thus far on a national scale suggest that commitments are primarily to pilot efforts. While pilot and alternative programs are important, they are insufficient by themselves. Even the several national and statewide networks involved in experiments in school restructuring of various sorts still represent a very small fraction of the schools and the students in those schools who need strengthened services.

These problems can be solved. Steps are being taken all across the nation to change education. We hope this report can help those who would change education make the decisions to do so, informed by the experience of others who have already moved.

Restructuring Schools

A Policy Statement of

the Council of Chief State School Officers

INTRODUCTION

The vitality of the American experience

is our capacity to change. This has propelled us from one frontier to another; as the 20th century ends, we are moving rapidly across a new one, dominated by global economic and technological forces.

Elementary and secondary education has reflected this dynamic of the American spirit, beginning as a colonial experiment, then developing into a cornerstone of pioneer communities, and thereafter serving as a partner in the agricultural, industrial and information revolutions. An expanded challenge has accompanied each advance. The new frontier for education is to empower every youngster to function effectively in a world increasingly dependent upon the intellectual skills and informed actions of all people.

This challenge is stimulating today's ferment of education reform. The task has moved quickly from improving traditional standards and organization to more profound changes that affect the very essence of teaching and learning and the structure of "schools," which in this statement means the place for instruction and learning. There are different definitions and different degrees of change, from reform to radical restructuring, but the purpose essentially is the same—to help our graduates achieve the highest levels of knowledge and experience and to enable them to practice the creative use of their knowledge and talent in civic responsibility, productive work, moral conduct, and personal fulfillment.

Our best schools and those young people privileged to attend them come close to the new expectations. Intense efforts must be directed to improving education for all with a special emphasis on at-risk students—those most in danger of being excluded from an American society and world that demand higher order thinking, i.e., reasoning and problem-solving skills.

The reforms of the 1980's led by state actions have centered on new standards of student, teacher, and school performance. Many of these reforms have been accompanied by very substantial increases in local and state support of education. The new expectations for performance, however, are not being met by many students. Changes in the structure, operation, and responsibilities for schooling are essential so that learning for all students is strengthened.

Throughout this year the Council of Chief State School Officers has examined various proposals and practices which are referred to as "school restructuring." The purpose of the review has been to determine the impact, or potential impact, of the practices that improve performance of students, particularly those students at risk of school failure. The Council does not endorse a particular approach to restructuring; the individual states will make those choices. The Council, however, has identified certain principles and strategies for restructuring. These should inform state or local actions in addressing the options for reform. Successful implementation of these principles requires acceptance of the shared responsibilities of private and public resources.

No matter what option of restructuring is used—site-based management, changed teacher authority, parental choice of school, curricular redesign, or others—the criteria for success must be the same. Does the "restructuring" improve student performance and allow students to reach their full potential?

The high school diploma must represent attainment of high standards—mastery of essential skills; foundation knowledge of our culture; self discipline and creativity; thoughtful application of knowledge and skills to problems as a worker, family member and citizen; caring involvement with others; and motivation for continuous learning Graduates should have capacities for flexibility, diligence, competence, and responsibility. Attainment of these standards and capacities must occur in a teaching and learning environment free to adapt to individual strengths and needs; hence, an environment which reflects the characteristics which are the objectives of the instruction.

We believe all young people can meet such standards. The schools must make it possible for students to reach them. Our most intense efforts must be to assure that those children and youth who lack family and community supports succeed.

PRINCIPLES
FOR CHANGE

Educators are changing schools in different ways—

instructional methods, times for learning, places of instruction, and techniques of assessment of student learning. There is a great richness of change which comes from the diversity and creativity of thousands of educators who follow no one specific model. By analyzing these efforts we identify essential principles to guide elementary and secondary education through effective changes.

These include.

• **A vision of expected student performance.** No matter what the nomenclature or approach of change, any restructuring must be guided by a persuasive vision of what students can and should accomplish. Establishing such goals and objectives is the most important responsibility for the state education agency in each state. Setting goals requires review of priorities and establishment of public agreement or consensus on what students should know and be able to do. Establishment of school district and school vision, goals, and objectives should be within the state framework.

• **A belief that all students can meet high standards.** We know from the experience of those teachers and administrators who have applied the most effective strategies for learning that all students can respond successfully to higher standards. Too often, disadvantaged students are burdened by an underestimation of their capacity to learn and by classroom environments that denigrate rather than encourage the development of high-order intellectual skills. A restructured education system must be based on the belief in the capacity of all children to respond to excellent instruction and to engage successfully in lifelong learning.

• **Essential role of families in learning.** Restructured schools must build on the role of families as teachers and must adapt to changed family responsibilities and patterns. Not only are the time and interests of most families consumed by employment demands, but economically deprived families often have primary needs that take precedence over those of the school. In order for all students to acquire the intellectual skills they will need, sustained resources of schools must be used to assure sufficient skills and capacities for all families to reinforce learning experiences outside the school. Schools must be sensitive to the culture, aspirations, and needs of parents. Efforts by the school and family must be made to strengthen the relationship between the home and school to support the intellectual and social motivation and development of children and families.

• **Linkages among school and social services.** Students who do not have support services through the family must have such assistance through private and public agencies or organizations. Connections with social services must often be made through schools. These connections can range from frequent adult contact and guidance within schools, to encouragement of more stimulating non-school opportunities for students, to providing bridges to the health and social supports needed by vulnerable children and youth. This issue is not—and never has been—one of schools assuming these extra-curricular functions. A restructured education system must help to create more supportive environments through collaborative programing between schools and other community agencies.

• **Comprehensive changes within schools.** Sustained systemic change must be integrated and comprehensive. Efforts to restructure which focus on one factor alone—school-based management, teachers' roles, choice—are not likely to produce significant change in student performance. Integration of several changes including teacher role, staff development, curricula, instruction, use of technology, assessment, school-based management, and other factors are essential for success.

• **Equity and excellence.** Successful restructuring is dependent on assurance of equity. As we strive for equity we must achieve excellence for all. The state has a prime responsibility to assure that the dual objectives of equity and quality permeate all aspects of school restructuring, including those of accountability, choice of school, rewards for performance, site-based decisionmaking, and accreditation.

• **Investment in professionals.** Restructured schools require administrators, teachers, support staff, and board members to carry out different and varied roles, relationships, and responsibilities and to work cooperatively to accomplish them. In order to ensure successful restructuring, additional training is necessary. Time and financial resources for staff development are the most important investments for restructuring. Much of restructuring centers on greater professional capacity. Training, retraining, and professional assessment systems must be changed to offer the best of what is known, with extra effort directed at integrating research and successful practices in helping the disadvantaged be successful students.

ENABLING STRATEGIES FOR THE STATES

These principles should guide state strategies.

- **Education, employment, and economic development.** Education, employment, and economic development are interdependent. Human resource development is lifelong. The quality and productivity of the work force is the combined responsibility of education, business, industry, and labor sectors working in a mutually supportive relationship to achieve common goals.

- **Legal and financial support systems.** Successful educational restructuring requires support and continuity in legal, financial, and organizational structures. States should ensure that federal, state, and local laws, rules, regulations, funding formulas, and program directions support restructuring efforts.

Central to state strategy must be a balance between cooperatively established state standards with accountability measures to assure results and local flexibility to develop and operate programs to achieve them. The greater the local flexibility in use of resources, the greater the need for local accountability based on student performance.

State education agencies have a major responsibility for assuring that these principles guide and shape restructuring of schools and school districts. Advocacy of the principles is the first order of state agency strategy. Other aspects of state strategy include commitment to and assurance of the following:

- **Continuing renewal of the education system.** The outcomes we want for all children take time to achieve. They require a strong commitment with an understanding that there is no static route to follow. Education is a journey, not a destiny. State leadership must inspire an environment within the state for strategic planning which leads to innovation, modification, and continued renewal.

- **Educating pre-professionals and professionals.** An important state strategy for restructuring schools is to assure a continuously improving professional staff. The challenges facing educators—individual and collaborative use of research, cooperative planning and teaching, shared management decisions—demand skills for which most professionals today were not originally nor subsequently prepared. State education agencies must assure investment in staff development. States also must work to reshape higher education training through certification and licensure requirements and incentive programs in order to prepare professionals who will change the education system.

- **Providing quality technical assistance.** Technical support and assistance must be provided by state education agencies for the application of statewide assistance to particular schools and to assist the exchange of practice among schools and school districts. Fast breaking developments in school reform all across the United States and in other nations require rapid and effective communication and transmission of concepts and findings through the education system.

- **Developing model collaborative actions.** The demonstration of collaborative state agency planning and implementation is essential to guide local education leaders to share planning, adjust resources among services, and enter new partnerships for services to children and their families. The examples should include both cooperative planning for resources and coordinated use of resources. This must include close connections among elementary, secondary, and higher education.

- **Supporting networks for education leaders.** Because the changes taking place in elementary and secondary education focus more and more on school site changes, they depend upon the willingness of local leaders to take risks and to be innovative. To support and sustain individual initiative, states must provide networks among leaders of change.

We are guided
by a vision

• **Ensuring equity.** The adoption of policies for change as well as the direction of scarce resources must be done in ways that assure public funds are used equitably and fairly. This may mean significant change of attitude about the weight and design of programs which provide extra, but necessary student and family services so that each student has an equal opportunity for school success. This may require unequal resources to achieve equitable results.

• **Analysis and evaluation of results.** Change must take into consideration solid research and demonstrated success. Results of demonstrations and more general revisions of schools must be carefully assessed. State agencies must assure analysis and evaluation of restructured schools to inform self-correction and report on potential applications to other locations.

of what all our children and young people must learn to do and to be. We are committed to changes in our education system which offer the potential for significant improvement in student learning. These principles and strategies will guide our course of action. Most of all, we pledge our support to those efforts which reach farther and more creatively to children and youth who need the most help in becoming full citizens of the 21st century.

IX. References

Adler, Mortimer J. (1982). *The Paideia Proposal: An Educational Manifesto*. New York: MacMillan Publishing.

_____. (1983). *Paideia Problems and Possibilities*. New York: MacMillan Publishing.

_____. (1984). *The Paideia Program: An Educational Syllabus*. New York: MacMillan Publishing.

Alves, Michael and Willie, Charles. (1987). "Controlled Choice: An Approach to Effective School Desegregation." *The Urban Review*. Vol. 17, No.2.

American Federation of Teachers' Center for Restructuring. (1988). "Professional Practice Schools: Building a Model." Washington, D.C.: Author.

Anyon, Jean. (1979, August). "Ideology and United States History Textbooks." *Harvard Educational Review*. Vol. 49, No. 3.

Bastian, Ann. (1989). "School Choice: Unwrapping the Package." New York. The New World Foundation.

Biddle, B. (1979). *Role Theory: Expectations, Identities and Behaviors*. New York: Academic Press.

Brophy, J. et al. (1981). *Student Characteristics and Teaching*. New York: Longman, Inc.

Brown, Rexford. (1988, Spring). "Schooling and Thoughtfulness." *Basic Education*. Vol.3, No.3.

California State Department of Education. (1988). "History-Social Science Framework for California Public Schools Kindergarten through Grade Twelve." Sacramento, CA: Author.

Career Ladder Clearinghouse. (1988). "Is 'Paying for Performance' Changing Schools?" Atlanta, Georgia: Author.

Carnegie Forum on Education and the Economy's Task Force on Teaching as a Profession. (1986). "A Nation Prepared: Teachers for the 21st Century." New York: Author.

Carroll, J.B. (1963). "A Model of School Learning." *Teachers College Record*. Vol. 63, No. 8. pp. 723-733.

Clark, Reginald. (1989). "The Role of Parents in Assuring Education Success in Restructuring Efforts." Washington, D.C.: Council of Chief State School Officers.

Coalition of Essential Schools. (1988). "Report of the Committee on Evaluation of the Coalition of Essential Schools." [Draft] Brown University: Author.

Cohen, Michael. (1988). "Restructuring the Education System: Agenda for the 1990's." Washington, D.C.: National Governors' Association.

Comer, James P. (1988). *School Power: Implications of an Intervention Project*. New York: Free Press.

Cooper, Myrna. (1988). "Toward Building a Professional Culture in School." *School/College Collaboration Teaching At-Risk Youth, Conference Proceedings*. Washington, D.C.: Council of Chief State School Officers.

Council of Chief State School Officers. (1989). "Restructuring Schools: A Policy Statement of the Council of Chief State School Officers." Washington, D.C.: Author.

Council on Basic Education. (1988). "New Teachers, Better Teachers." Washington, D.C.: Author.

Council on School Performance Standards. (1989). "Preparing Kentucky Youth for the Next Century: What Students Should Know and Be Able To Do and How Learning Should Be Assessed." Vol. I. Frankfort, Kentucky: Author.

Cuban, Lawrence. (1989, June). "The 'At-Risk' Label and the Problem of Urban School Reform." *Phi Delta Kappan*. Vol. 70, No. 10, pp. 780-801.

Darling-Hammond, Linda. (1988). "Accountability for Professional Practice." in American Federation of Teachers. *Professional Practice Schools: Building a Model*. Washington, D.C.: Author.

Edmonds, Ronald. (1979). "Effective Schools for the Urban Poor." *Educational Leadership*. Vol. 37, pp. 15-18.

Elmore, Richard F. (1988). "Choice in Public Education." in William Boyd and Charles Kirchner. *The Politics of Excellence and Choice in Education*. New York: Falmer Press.

Elmore, Richard F. (1989). "Working Models of Choice in Public Education." [Draft] Rutgers University: Center for Policy Research in Education.

Frazier, Calvin M. (1988). "An Analysis of a Social Experiment: School University Partnerships in 1988." Occasional Paper No. 6. Seattle, Washington: Center for Educational Renewal.

Glenn, Charles. (1989). "Parent Choice and American Values" in Joseph Nathan. *Public Schools by Choice*. Bloomington, Indiana: Meyer Stone Books.

Goodlad, John I. (1984). *A Place Called School: Prospects for the Future*. New York: McGraw-Hill.

Goodlad, John I. (1988). "The National Network for Educational Renewal: Past, Present, Future." Occasional Paper No. 7. Seattle, Washington: Center for Educational Renewal.

Gray, Dennis and Lynn, David H. (1988). "New Teachers, Better Teachers: A Report on Two Initiatives in New Jersey." Washington, D.C.: Council for Basic Education.

Hill, Paul et al. (1989). *Education Progress: Cities Mobilize to Improve Their Schools*. Santa Monica, California: Rand Corporation.

Hilliard, Asa G. (1988). "Promoting African-American Student Achievement." *School/College Collaboration: Teaching At-Risk Youth, Conference Proceedings*. Washington, D.C.: Council of Chief State School Officers.

"Iowa, Arkansas Enact 'Choice'; Proposals Gain in Other States." (1989, March 15). *Education Week*.

"Lawmakers Floating 'Radical' Ideas to Shift Control of Kentucky Schools." (1989, September 6). *Education Week*.

Levin, Henry. (1987). "Education as a Public and Private Good." *Journal of Policy Analysis and Management*. Vol.6, No.4, pp. 628-641.

Levy, Janet. (1989). "Joining Forces: A

Report from the First Year." Alexandria, Virginia: National Association of State Boards of Education.

Montero-Sieburth, Martha. (1989, April). "Classroom Management: Instructional Strategies and the Allocation of Learning Resources." Harvard University: Basic Research and Implementation in Developing Education Systems (BRIDGES).

Moore, Donald and Davenport, Suzanne (1989). *The New Improved Sorting Machine: Concerning School Choice.* Chicago, Illinois: Designs for Change.

National Governors' Association. (1987, January 15). *Capitol Ideas.* HR. 87. 02. Washington, D.C.: Author.

National Network of Principals' Center. (1988). *National Directory of Principals' Centers.* Harvard Graduate School of Education: Author.

Newell, A. and Estes, W.K. (1983). "Cognitive Science and Artificial Intelligence." *Research Briefings,* Washington, D.C.: National Academy Press.

New Jersey State Department of Education. (1988). "Public School Choice: National Trends and Initiatives." Trenton, New Jersey: Author.

"New Partnerships: Education's Stake in the Family Support Act of 1988." (1989). A Statement of: American Public Welfare Association, Center for Law and Social Policy, Center for the Study of Social Policy, Children's Defense Fund, Council of Chief State School Officers, Institute for Educational Leadership, National Alliance of Business, National Association of State Boards of Education, and National Governors' Association. Washington, D.C.: W.T. Grant Foundation.

Oakes, Jeannie. (1985). *Keeping Track: How Schools Structure Inequality.* New Haven: Yale University Press.

O'Rourke, Patrick. (1987, Spring). "Shared Decisionmaking at the School Site: Moving Toward a Professional Model." *American Educator,* pp.42-47.

Resnick, Lauren B. (1987). *Education and*

Learning to Think. Washington, D.C.: National Academy Press.

Schlechty, Phillip. (1989). "Creating the Infrastructure for Reform." Washington, D.C.: Council of Chief State School Officers.

Sirotnik, Kenneth A. and Clark, Richard. (1988, May). "School-Centered Decisionmaking and Renewal." *Phi Delta Kappan,* pp.660-664.

Sizer, Theodore. (1984). *Horace's Compromise—The Dilemma of the American High School.* Boston: Houghton Mifflin.

Slavin, Robert and Madden, N. (1989). "Effective Classroom Programs for Students At Risk." in Slavin, R. et al., *Effective Programs for Students At Risk.* Needham Heights, Mass.: Allyn and Bacon.

"South Carolina Considering 'Flexibility' for High Scoring Schools" (1989, February 15). *Educational Week.*

Southern Regional Education Board Career Ladder Clearinghouse. (1988). "Is 'Paying for Performance' Changing Schools: The SRED Career Ladder Clearinghouse Report 1988." Atlanta, Georgia: Author.

Tucker, Marc and Mandel, David. (1986, September). "The Carnegie Report—A Call for Redesigning the Schools." *Phi Delta Kappan,* pp. 24-27.

U.S. Department of Education. (1988). "Creating Responsible and Responsive Accountability Systems." Office of Educational Research and Improvement. Washington, D.C.: Author.

Webb, N. (1980). "Learning in Individual and Small Group Settings." Los Angeles: University of California.

Wehlage, Gary G. et al. (1989). *Reducing the Risk: Schools As Communities of Support.* New York: Falmer Press.

Weinstein, R. (1976). "Reading Group Membership in First Grade: Teacher Behaviors and Pupil Experience Over Time." *Journal of Educational Psychology.* Vol. 68, pp. 103-116.

Wiggins, Grant. (1989). "Happily Taking and Teaching to the (Authentic) Test: Instructionally-Supportive Assessment." Washington, D.C.: Council of Chief State School Officers.

Willie, Charles. (1989). "Choice as One Among Several Components in the Restructuring of Schools and School Districts and in the Improvement of Education for All Students." Washington, D.C.: Council of Chief State School Officers.

Wimpelberg, Robert K. (1987). "The Inservice Development of Principals: A New Movement, Its Characteristics, and Future." New Orleans: University of New Orleans.

Zigler, Edward. (1988). "A Solution to the Nation's Child Care Crisis: The School of the Twenty-First Century." Paper presented at the Third Annual Elementary School Center Conference, New York.

Council of Chief State School Officers
379 Hall of the States
400 North Capitol Street, N.W.
Washington, DC 20001-1511
(202) 393-8159